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Floodplain Mapping - Model Study of the River Frome (Gloucestershire)

**Final Report
Volume 1**

**Report EX 3191
August 1995**



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Contract

This report describes the "Floodplain Mapping - Model Study of the River Frome" carried out by Wallingford Water and commissioned by the National Rivers Authority - Severn Trent Region. The NRA representative was Mr D Pettifer, and Wallingford Water was represented by Mr TE Parkinson and Mr RJ Millington. The HR Wallingford job number was RQR 1568. The work was carried out by Mr PG Hollinrake (HR), Mr RJ Millington (HR) and Miss HA Houghton-Carr (IH).

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Summary

Floodplain Mapping - Model Study of the River Frome (Gloucestershire)
Final Report

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In September 1993 the National Rivers Authority - Severn Trent Region commissioned Wallingford Water, the joint venture between the Institute of Hydrology and HR Wallingford, to carry out the "Floodplain Mapping, Model Study of the River Frome (Gloucestershire)" study.

This report gives a detailed description of the hydraulic modelling components of the study, and provides a summary of the hydrological components which are presented in detail in Report EX3171. The objective of the study was to develop a computational hydraulic model for the purposes of identifying flooded outlines for events of various return periods. The hydraulic model was constructed using the SALMON-F modelling software, modified to cope with supercritical flows, and was calibrated using observed data from three events, as well as data available from the physical modelling study of the Ebley Mill gauging station, presented in Report EX3170.

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1 Introduction

1.1 Background

In September 1993 the National Rivers Authority - Severn Trent Region (NRA-ST) commissioned Wallingford Water (WW), the joint venture between the Institute of Hydrology and HR Wallingford Ltd, to carry out the "Floodplain Mapping, Model Study of the River Frome (Gloucestershire)" study. The overall objective of the study was to construct and prove a hydraulic model of the River Frome and a part of its tributary, the Nailsworth Stream, in order to determine the flood plain limits for six design events of specified return periods of between 5 and 150 years.

This report presents the results of the hydraulic modelling, including a summary of the hydrological aspects of the overall study.

1.2 Terms of reference

The terms of reference for the overall study are defined in the NRA-ST document "Brief for Report and Advisory Works. Floodplain Mapping - Model Study of the River Frome (Gloucestershire)" of July 1993, the WW proposal to undertake the study of August 1993 and the NRA-ST letter of appointment dated 24 September 1993. The terms of reference for the study can be summarised as follows:

- (a) To identify current data availability for the Frome catchment, including hydrological, hydrometric, topographical and structure data. Also to determine the requirement for further survey data required to complete the model study.
- (b) To undertake a hydrological study to identify suitable calibration events for the modelling, and thereby to derive calibration and design inflows for the hydraulic modelling.
- (c) To set up and calibrate a hydrodynamic model of the River Frome between the Main River Limit at Whitehall Bridge and the flapped outfall into the River Severn, and of the Nailsworth Stream between Egypt Mill and its confluence with the River Frome.
- (d) To determine the flood levels for the 1 in 5, 1 in 10, 1 in 25, 1 in 50, 1 in 100 and 1 in 150 return period flood events and plot these on 1:2500 scale plans of the River Frome.
- (e) To identify where existing residential and commercial property is at risk from flooding in a 1 in 100 year flood event.
- (f) To produce a reduced hydrodynamic model of the Lower Frome to investigate the effects of flows from the Gloucester and Sharpness canal in relation to flows in the River Frome and levels in the River Severn.

1.3 The River Frome

The Frome catchment extends from the Cotswold escarpment in the east, on the boundary of the Thames and Severn-Trent regions of the NRA, through to the River Severn in the west. A plan of the catchment and river system is shown in Figure 1.

The River Frome rises in the north-east of the catchment, high up on the Cotswold escarpment, and flows southwards. After about 10km the river turns westwards for another 10km or so, during which it is joined by two tributaries from the north, the Holly Brook and the Toadsmoor Brook. The Holly Brook confluence is immediately downstream of the Main River Limit at Whitehall Bridge. Along much of this stretch the river runs parallel to the now disused Thames and Severn Canal. The river then turns northwards for about 5km towards Stroud, the largest town in the catchment, and then westwards again to Ebley Mill gauging station. Ebley Mill is the only gauging station in the catchment, and has a catchment area of 198km². Just upstream of Ebley Mill the river is joined by the Nailsworth Stream from the south and the Dudbridge Bypass channel from the north. The flood relief channel is part of the old Stroudwater Canal and carries the flows from three northern tributaries, the Randwick Stream, the Painswick Stream and the Slad Brook.

Downstream of Ebley Mill the river continues in a north-westerly direction for a further 10km towards its confluence with the River Severn. Along much of this stretch the river runs parallel to the now disused Stroudwater Canal. About 1km before the confluence, there is a flow diversion into the Gloucester and Sharpness Canal for water supply to the Bristol area. The total catchment area upstream of the River Severn outfall is approximately 226km².

The Frome catchment is characterised by steep valley sides sloping down to the river below and small, fast-flowing streams, particularly in the upper reaches. The catchment lies on heavily fissured, oolitic limestone and liassic sandstone bedrock which dips from the Thames basin into the Frome basin. The limestone is thought to act like a sponge, absorbing water until the aquifers are filled; heavy rain may take several days to have an effect, and water lost in the upper reaches may well reappear further downstream. The soils tend to be well-drained and calcareous, with clayey, loamy and stony components. In the downstream part of the catchment some non-calcareous soils are also present.

The catchment is predominantly agricultural in nature, though urban areas account for around 10% of all land use. Bailey, Reference 1, assigned 50% of the catchment to permanent grassland and 15% to temporary grassland, with another 10% to woodland. The remainder is made up of crop-growing areas and open water such as canals and lakes. The Stroud conurbation extends for some distance along the nearby valley bottoms, as does the smaller town of Nailsworth in the south of the catchment. There are also numerous small villages.

The river system itself can be visualised in terms of four reaches of differing characteristics.

Frampton to Chalford Reach

This is the uppermost reach of the River Frome and is distinguished by the general absence of floodplain development and a limited number of control structures. The floodplain is relatively narrow and is shared with the relict Thames and Severn Canal, which is thought to carry a proportion of the flow in a flood event. The reservoir at Bakers Mill originally built to feed the canal is one

of the major features of the reach and the operation of the sluices at this location may impact on downstream flooding. The downstream end of the reach is characterised by housing development adjacent to the floodplain, and a history of flooding of the gardens of these properties. The end of the reach can be considered as the bridge at the main Stroud - Cirencester Road.

Chalford to Ebley Reach

From Chalford to Bowbridge the Frome is characterised by a generally narrow floodplain and the large number of control structures and mill buildings. These are at their most dense in the vicinity of Thrupp and the channel frequently splits into two channels to provide separate flow paths around and through these. The majority of the mills are disused and many of the controlling structures have been rationalised in order to reduce the need for maintenance and operation. A number of the structures are derelict and inoperable. The Thames and Severn canal is intermittent in this reach, though there appear to be a number of locations where interaction between the canal and river could take place given sufficiently high flows. Much of the floodplain is developed, and this includes both areas of housing and industrial development of varying age. The end of the reach is marked by the culvert carrying the river under the new Dudbridge road, and its confluence with the Nailsworth Stream.

Ebley to the River Severn

This reach sees a marked change in the size of the river, predominantly due to the inflows of the Nailsworth Stream and Dudbridge Bypass channel in close proximity to each other. Upstream of the Nailsworth Stream confluence the floodplain remains relatively narrow and a number of mill structures occur but downstream of this point the floodplain begins to expand and the mills become less frequent. Downstream of Ebley Com Mill the river bifurcates into distinct north and south channels, and these do not have a confluence until Churchend, close to the M5 motorway. These channels in turn have a number of subsidiary bifurcations, in particular the Banty Ditch which flows in-between the two channels downstream of Ryeford. The enclosed floodplain is in the main undeveloped, and is generally lower lying than the water level in the bounding channels.

Downstream of Churchend the river reverts to a single channel within a relatively wide floodplain and the river is embanked to varying degrees. The embanking is particularly pronounced downstream of Fromebridge Mill where low lying land on the Severn floodplain is protected. At Whitminster part of the river flow is split by a control structure into the old Stroudwater canal and from there into the Gloucester and Sharpness canal which provides the water supply for Bristol. The remaining flow passes into twin channels which cross under the Gloucester and Sharpness canal by siphon and then discharge into the River Severn via a tide flap. The area downstream of the canal and enclosed by the two channels is a flood storage area designed to alleviate the possibility of overtopping of the main embankments onto the Severn floodplain.

The Nailsworth Stream

The Nailsworth stream is the largest of the Frome tributaries and is similar in characteristics to it. The stream flows through a small valley which it shares throughout most of its length with the main Stroud - Nailsworth road. In its upper reaches between Egypt Mill and Dunkirk Mill the channel is split and flows on either side of disused mill ponds which are now heavily vegetated. The confluence of the channels occurs within a culvert at the Critchley's site upstream of Merrett's Mills and downstream of here the river is predominantly within a

single channel. There are a number of mill structures though the control structures on these are predominantly redundant. The floodplain is restricted both by the proximity of the road and by the presence of new housing development. At the Erinoid works the channel enters a long culvert before re-emerging and then passing through a second culvert upstream of its confluence with the River Frome. The stream drops over a weir into the old channel of the River Frome at Dudbridge then passes under the new Dudbridge road by culvert to join the River Frome.

2 Hydrological investigation

2.1 Introduction and approach to hydrological study

This section summarises the hydrological review of the Frome catchment which is described in full in the "Hydrological Study", Report EX 3171. The review made use of all available data to develop the best possible estimates of the design flood inflows required by the hydraulic model, and also incorporated a routing model of the Frome catchment and a physical model of the Ebley Mill gauging station. The methods of flood estimation adopted were those of the FSR and associated documents. The FSR rainfall-runoff method, whereby rainfall is converted to flow using a deterministic model of catchment response (the unit hydrograph and losses model), was used for the hydrological modelling because it synthesises the entire flow hydrograph, which is required in cases such as this where flood routing is involved.

The three parameters of the unit hydrograph and losses model are:

- Tp - time-to-peak of the unit hydrograph which determines how quickly the catchment responds to effective rainfall input
- PR - the percentage runoff which is the ratio of total to effective rainfall i.e. the proportion of the total rainfall input which becomes response runoff in the river. PR is divided into two parts: a standard part SPR and a dynamic part DPR
- ANSF - the average non-separated flow or baseflow which represents the flow in the river before the event started.

The model parameters are related via multiple regression equations to physical and climatic characteristics of the catchment, enabling flood estimates to be made at ungauged sites. However, the FSR recommends that where possible such no-data estimates are refined using observed data from or near to the site of interest. There are three main ways in which these local data may be used, all of which were used in the hydrological study:

- direct estimation of the model parameters at the subject site through analysis of observed flood events
- indirect estimation of the model parameters at the subject site through estimation of hydrological characteristics which are related to the model parameters i.e. catchment lag time is closely related to Tp, whilst baseflow index is similarly related to SPR
- transfer of information from neighbouring catchments.

2.2 Physical modelling of Ebley Mill gauging station

The initial phase of the hydrological study involved a review of the out-of-bank rating in use for the Ebley Mill gauging station. This was required for the purpose of accurately assessing the magnitude of flows which were greater than bankfull, and therefore beyond the range of the current rating curves. Under flood conditions the weir, and the cableway site 90m upstream which is used to calibrate the weir for in-bank flows, is bypassed by flow over the left bank floodplain. The work was carried out using a physical model and the main conclusions of the study were as follows:

- the existing rating for the station was suitable for flows up to $20\text{m}^3/\text{s}$ (ie all recorded flows to date)
- the rating derived from the physical model should be used for all flows in excess of this (ie over bankfull).

The results of the physical modelling are presented in full in the "Ebley Mill Gauging Station Physical Model Study", Report EX 3170.

2.3 Data collection and processing

Both flood peak and flood event data were available for, and used in, the hydrological study. The flood peak data were available in the form of annual maxima data and peaks-over-threshold series. The flood event data typically required for analysis include flow data for the event, recording raingauge data for the event, daily raingauge data for both the event and the five days preceding it, and estimated soil moisture deficit data at 09:00 on the first day of the event. Full details of the events selected and the flood event analysis are given in the Hydrology Report. The locations of gauges and stations from which data were collected are shown in Figure 2.

Flow data were derived from stage data at Ebley Mill gauging station using the appropriate rating equations. The flow record was continuous from January 1969 up to the present day, and data up to January 1994 were collected, thus providing 24 complete water years of data. Major floods are known to have occurred during the 1950's and 1960's, prior to installation of the gauging station, but unfortunately very little information concerning these events was available. Some stage data from six continuous level recorders within the catchment were also available.

The raingauge coverage of the Frome catchment is adequate and generally better for daily gauges than for recording gauges. For a number of mid-1980's events only one recording gauge, usually some distance from the catchment, was operational whereas the daily gauges were spread fairly evenly across the catchment. The only long-term recording raingauge within the Frome catchment is at Miserden in the north-east of the catchment. There are, however, four long-term recording raingauges nearby at Dowdeswell, Longford and Netheridge, all to the north, and at Kingswood to the south-west. In addition, three new recording raingauges were installed within the catchment during May and June 1993 at Painswick Lodge in the north, at Eastington Park in the east, and at Avening Court in the south. Daily rainfall data from raingauges within or close to the Frome catchment were also obtained.

Estimates of soil moisture deficit at the beginning of each selected flood event were obtained from three sites: Cheltenham to the north, Cirencester to the south-east, and Monmouth to the west on the Welsh side of the River Severn.

Physical and climatic characteristics of the catchments were derived from maps to enable no-data estimates of the model parameters to be made using FSR regression equations. These catchment characteristics are tabulated in the full hydrological report.

2.4 Derivation of model parameters

The model parameters for the catchment to Ebley Mill were estimated directly by analysis of observed flood events, and are presented in Table 1. The derived model parameters showed considerable variation, indicating the dominating influence of the downstream urban areas. Many of the flood peaks are clearly the products of rapid urban runoff from the Stroud conurbation, which reach the gauging station and pass before the rural runoff component has travelled downstream. This made it necessary to divide the flood events into a group where the flow peak was caused by urban runoff, and a group where the entire catchment was believed to be responding. This separation was done on the basis of mean catchment lag time, as indicated in Table 1, and reduced the variability in the derived model parameters. Table 2 shows that the unit hydrograph time-to-peak was some 44% lower than the value estimated from catchment characteristics, whilst the standard percentage runoff was some 75% lower than the value derived from catchment characteristics. Similarly the catchment characteristics method overestimated the baseflow by around 30%.

In another approach, hydrological characteristics which are related to the model parameters were estimated. The catchment lag analysis at Ebley Mill gave time-to-peak values which agreed closely with those derived by flood event analysis, as shown in Table 2. Lag analysis from the continuous level recorders in the catchment gave inconclusive results. Standard percentage runoff derived from BFI was similar to the value derived from catchment characteristics, whilst the value derived from the new HOST classification was some 60% higher, again as shown in Table 2.

The model parameter values derived from the rainfall-runoff analysis were taken as the best estimate of the true values for the Frome catchment to Ebley Mill. The limits of the hydrodynamic model divided the Frome catchment naturally into six subcatchments: Upper Frome, Toadsmoor Valley, Slad Brook, Painswick Stream, Randwick Stream and Nailsworth Stream, as shown in Figure 3. The model parameter information was transferred to each of these six subcatchments by simply applying the ratio of the observed value to the no-data estimate of the value at Ebley Mill to the no-data estimate for the particular subcatchment. The model parameter values for each of the subcatchments are given in Table 3.

The transfer was straightforward for four of the subcatchments, where the observed value used was that from the events showing a combined rural and urban response, but more complicated for the Slad Brook and Nailsworth Stream which both have a fairly large rural area with an urban area concentrated at the catchment outfall. For these two subcatchments it was necessary to model the rural and urban responses separately, with the rural parts modelled in the same way as for the other four subcatchments, and the urban parts modelled in the corresponding way, but where the observed value used was that from the events resulting solely from urban runoff. The two hydrographs produced for each of these subcatchments were added together to give the total subcatchment hydrograph. Four remaining areas were modelled as diffuse lateral inflows, with their hydrographs modelled on those for the Nailsworth Stream subcatchment, as described in the Hydrology Report.

2.5 Derivation of calibration inflows and design inflows

Inflow hydrographs were derived for calibration of the hydraulic model, and for the six return period design flood events. Three calibration events were chosen occurring in December 1965, May 1979 and January 1994, and inflow hydrographs were generated for each of the subcatchments using the observed rainfall and soil moisture deficit data. Inflow hydrographs for return periods of 5, 10, 25, 50, 100 and 150 years were generated for each of the subcatchments using FSR design rainfall statistics.

The predicted calibration event inflow hydrographs for the May 1979 and January 1994 events were verified using a RIBAMAN routing model of the River Frome, and checking the shapes and peak flows of the routed hydrographs at Ebley Mill. Results are presented in the Hydrology Report. The main feature apparent from the routing was the inability of the FSR model to simulate the raised baseflow component of the hydrograph which occurs after the event has passed. This baseflow is interpreted as water entering into storage unrepresented in the model for example groundwater. However, the routed inflows produced reasonable estimates of peak discharge at Ebley Mill, which were conservative in terms of the peak flow.

The full hydrodynamic model, which provides a full representation of flood plain storage and performance of structures, produced a further reduction in peak flow at Ebley Mill, possibly also associated with an increase in the length of time the hydrograph took to peak. The design events were run only with the full hydrodynamic model, due to the greater accuracy attributable to the results from this model.

2.6 Flood frequency analysis

Flood frequency analysis was carried out at Ebley Mill using both the 24 years of observed annual maxima data and a 26-year series including estimates of the July 1968 and May 1969 flood peaks. The fitted curves are presented in Figure 4.

The 24 years of observed flow data at Ebley Mill, fitted by an EV1 line, appear to be not wholly representative of the catchment. This record does not contain any of the major floods reported in the 1950s and 1960s before the gauging station was installed. The flood frequency curve fitted to the annual maxima steepens significantly, from EV1 to EV2, when the estimated 1968 flood peak is included. If the 1968 flood is typical of large floods on the catchment, then this EV2 curve may be a better representation of the true flood frequency curve of the catchment. This EV2 curve corresponds fairly closely with the curve derived from the observed mean annual flood and the region 4 growth curve.

The flood frequency curve derived from the routed design events has a higher mean annual flood, but otherwise is of similar gradient to the EV2 curve. This would be expected if large floods are missing from the observed record from which the mean annual flood was derived. The curve from routed flows corresponds fairly closely with the curve derived from the observed mean annual flood and the region 6/7 growth curve. This suggests that the behaviour of the Frome catchment may be more like that of catchments in the neighbouring Thames basin, than that of catchments in the Severn region.

A fairly narrow band can be defined which indicates the most likely position of the true flood frequency curve for the Frome at Ebley Mill. This band has a width of about $3 \text{ m}^3 \text{ s}^{-1}$ at the low (5-year) return period end, and widens to about $8 \text{ m}^3 \text{ s}^{-1}$

at 150-years return period. The flood frequency curve derived from the routed flows forms the upper limit of this band, and it may be possible to narrow the band by further data collection and analysis.

3 The hydraulic model

3.1 General description

The hydraulic model was constructed using the HR package SALMON-F, which is a general purpose river simulation model suitable for branched and looped river systems. It can include floodplains where the water level is the same on the floodplain as in the adjacent channel, or floodplains which are separated from, and have different water levels to, the river. The version of SALMON-F used for the River Frome modelling includes the ability to spill directly between adjacent channels as well as a modification to the calculation of channel flow which allows the model to cope with the occurrence of supercritical flows.

A SALMON-F model is constructed by dividing the area to be modelled into cells which can be of varying types including river, structure, junction and floodplain. The cell boundaries can be made up of river sections, embankment sections, floodplain or causeway sections or no-flow boundaries which act as a hard boundary to the flow domain. Structures can be incorporated either within structure cells, which allow multiple structure elements at a particular location, or within embankments and causeways.

It is assumed within the software that the water level is constant across any section, and that the direction of flow is perpendicular to that section. The selection of section location is therefore critical. Storage in floodplain cells is calculated from a tabulation of storage area against water depth used in conjunction with the flow into and out of the cell.

Inflows to the model are given at the upstream model boundaries, and tributary inflows can be specified between adjacent river sections. Lateral inflows can also be specified to allow a hydrograph to be input over a reach of the model. Downstream boundaries within the model require either a stage hydrograph or a rating curve.

3.2 Availability of survey data

At the outset of the study all available floodplain and channel survey data were collected from the NRA-ST offices at Tewkesbury. These data were then collated in order to identify possible shortfalls in the data availability. The data initially supplied included the following:

- contoured floodplain plans for the River Frome between the A38 and the River Severn (from the River Severn floodplain survey - Cartographical Services)
- contoured floodplain plans for the River Frome between the A38 and Chalford (Cartographical Services)
- contoured & spot height plans for the River Frome from Chalford to Whitehall Bridge
- channel and structure survey for the River Frome between Millend Mills and Stanley Mills (1984)
- channel and structure survey for the River Frome between the River Severn and Meadow Bridge, between Stanley Mills and Whitehall Bridge, and of the Dudbridge Bypass channel (Simmons Survey Partnership - 1987)

- channel survey for the River Frome between Whitminster Weir and the M5 motorway (Land Development Services - 1990)
- channel survey for the River Frome between Whitminster Weir and the A38 (NRA - 1991).

Additionally, a survey was carried out by Merrett Survey Partnership in 1992 of the following reaches of the Frome:

- River Frome right channel downstream of Whitminster House (reach 1)
- Fromebridge Mill bypass and mill channels downstream of the A38 (reaches 2 and 3)
- A38 to Millend Mill (reach 5)
- Churchend Mill bypass channel (reach 4)
- Meadow Bridge to railway upstream of Bond's Mill (reach 6)
- Bond's Mill culvert channel (reach 7)
- Railway upstream of Bond's Mill to the bifurcation downstream of Ebley Corn Mill (reach 8)
- Stanley Mills to the bifurcation downstream of Ebley Corn Mill (reach 9)
- Fromehall Mill to the Thames and Severn Canal siphon (reach 10)
- Bowbridge to Griffin Mill estate (reach 11)
- Griffin Mill estate right hand channel (reach 12)
- Phoenix Mill to Brimscombe Pond (reach 14)
- Brimscombe Port to St Marys Mills (reach 17).

The above surveys totalled c.600 sections and provided the majority of data required for the construction of the Frome hydraulic model, with some exceptions. Initially, additional survey were identified as being required for the construction of the physical model and ten sections were surveyed along the Ebley reach of the river by Cartographical Services in December 1993 for this purpose. Further data were required for the whole of the Nailsworth Stream, and for the reach of the Frome upstream of Golden Valley Lock, and also for a large number of structures throughout the River Frome valley which had either not been surveyed previously or for which the available survey data was insufficient. In total an extra 420 sections were identified as being required, 168 on the Nailsworth Stream, 39 on the upper reach of the Frome and 213 as infill for the previous surveys. The survey data were collected by HR Wallingford's survey team under a separate contract and as such details of the survey work are not given here. A set of master plans indicating the locations of all the Frome survey data has been prepared for the purposes of this study and these have been supplied separately to NRA-ST along with the surveyed section data itself.

3.3 The River Frome Models

Due to the length of the reach and the complexity of the features to be modelled, the overall model was subdivided into three separate sub-models. The Upper Frome sub-model extended from Whitehall Bridge to upstream of the Bath Road Bridge in Stroud, the Lower Frome sub-model extended from the downstream end of this first model to the outfall into the River Severn at Framilode, and the Nailsworth Stream sub-model comprised the reach of the Nailsworth Stream between Egypt Mill to downstream of the weir at the Frome confluence at Dudbridge. The schematisation of each model is described in detail in Section 3.4.

3.4 Model schematisation

The model schematisation for the each of the sub-models was undertaken with regard to the need to represent the following:

- structures within the modelled reach
- areas of floodplain storage and floodplain flow separated from the channel by natural or man-made embankments
- the potential for flow between adjacent channels
- adequate representation of flow splits
- adequate resolution of the channel, particularly in steep reaches.

Schematic drawings of the River Frome models have been produced detailing the location and extent of each of the model sections, plotted at 1:2500 scale for direct comparison with the contoured plans. These drawings are presented in Volume 2 of this report and a summary of the schematisation is provided in Table 4.

The Upper Frome sub-model

The Upper Frome sub-model included a total of 482 sections, of which 343 were river sections, 110 were embankments and the remainder floodplain sections. A total of 83 structure complexes were modelled, of which 28 were bridges. The majority of the river was modelled using river sections representing both the channel and adjacent floodplain. However, 40 floodplain cells were used in the following locations:

- | | | |
|----------------------------|---|--|
| Griffin's Mill | - | a flow path overland above the mill culvert (floodplain cell 107) |
| Thrupp works | - | a flow path around the works separated from the channel (floodplain cell 108) |
| Brimscombe Football Ground | - | floodplain storage (floodplain cell 109) |
| Brimscombe Pond | - | a flow path from upstream of Brimscombe Mill Pond Culvert to the channel downstream of the control sluices (floodplain cells 110, 111) |
| Brimscombe Port | - | floodplain storage and a separate flow path around the Brimscombe Port area (floodplain cells 112, 113, 114, 115) |
| Wimberley Mills | - | floodplain storage and a separate overland flow path avoiding the culverts (floodplain cells 116, 117) |
| St Marys Mill | - | floodplain storage between the river and the canal upstream of St Marys House Culvert (floodplain cell 118) |
| Chalford Industrial Estate | - | floodplain storage and overland flow route avoiding the culverts (floodplain cells 119, 120) |
| Golden Valley | - | floodplain storage and flow route on the right floodplain between Bakers Mill and Golden Valley Lock (floodplain cells 121 to 136) |
| Bakers Mill | - | Bakers Mill reservoir is represented by a series of floodplain cells between the canal and the river (floodplain cells 137, 138, 139, 140) |

- Puck Mill to Whitehall Bridge - floodplain storage and flow paths adjacent to the river (floodplain cells 141 to 147).

The disused Thames and Severn Canal was included in the model as two separate river reaches. The first of these began at the siphon downstream of Arundell Mill and continued up to the caravan park at Brimscombe. The second reach began upstream of Brimscombe Port, and then ran continuously up to the upstream model limit at Whitehall Bridge. Where interaction was possible either between adjacent branches of the river or between the river and the canal, embankments were incorporated into the model allowing direct spilling between the two channels. Spills of this type were included in the following areas:

- | | | |
|---------------------|---|---|
| Arundell Mill | - | between the canal and the millpond, and around the siphons |
| Bowbridge | - | between the canal and the river in the area of Bowbridge housing estate |
| Griffin's Mill | - | between the twin branches of the river downstream of Griffin's Mill |
| Griffin Mill Estate | - | between the canal and the river |
| Phoenix Mill | - | between the twin branches of the river and also between the canal and the river |
| Boume Mill | - | between the canal and the river and between the upper and lower levels of the river |
| Wimberley Mills | - | between the canal and the river |
| St Marys Mill | - | between the canal and the river adjacent to St Marys Mill Weir |
| Iles Mill | - | between the upper and lower branches of the river upstream of Iles Mill Bypass Sluices |
| Belvedere Mill | - | between the canal and the mill pond adjacent to Belvedere Pond Bridge |
| Golden Valley | - | throughout the reach between Golden Valley Lock and Whitehall Bridge between the river and the canal. |

The Lower Frome sub-model

The Lower Frome sub-model included a total of 765 sections, of which 354 were river sections, 267 embankments and the remainder floodplain sections. A total of 69 structure complexes were modelled, of which 23 were bridges. Unlike the Upper Frome sub-model this reach included significantly more floodplain cells (112) in the following areas:

- | | | |
|-----------------------------------|---|---|
| Gloucester & Sharpness Canal | - | floodplain storage between the twin arms of the River Frome and the Gloucester and Sharpness canal, and adjacent to Wheatenhurst Sluices (floodplain cells 1 to 10) |
| Walk Rhine to Fromebridge Mill | - | embanked floodplain storage (floodplain cells 11 to 20) |
| Fromebridge Mill to Meadow Bridge | - | left and right bank embanked floodplain storage (floodplain cells 21 to 40) |
| Meadow Bridge to Ebley Refuse Tip | - | central floodplain between the northern and southern branches of |

	the River Frome (floodplain cells 41 to 52, 58 to 63, 69 to 73, 79 to 92)
Beards Mill	- left bank floodplain adjacent to the mill (floodplain cells 53 to 57)
Bridgend Mill	- right bank floodplain between Bridgend Kennels and the railway embankment (floodplain cells 64 to 68)
Banty Ditch	- floodplain between the northern arm of the River Frome and Banty Ditch (floodplain cells 74 to 78, 83, 84)
Ryeford Stroudwater Canal	- representation of the storage within the canal adjacent to Ryeford Saw Mills
Redhill Bridge	- left bank floodplain adjacent to the southern arm of the River Frome (floodplain cells 93A to 95A)
Ebley Corn Mill	- floodplain storage between the mill channel and the bypass channel and on both banks upstream of the mill (floodplain cells 93 to 95)
Ebley Mill	- left bank floodplain adjacent to the gauging station and storage on the rugby ground between the Dudbridge Bypass channel and the River Frome (floodplain cells 98 to 101)
Fromehall Mill	- upstream mill pond and adjacent floodplain (floodplain cells 102, 103)
Lodgemore Mill	- storage upstream of the mill between the River Frome and the Stroudwater canal.

As with the Upper Frome sub-model embankments were included to allow direct spilling between channels where there was no appreciable storage between them, or where the floodplain in each channel was being modelled as part of the river channel section. Spills of this type were incorporated in the following locations:

Meadow Bridge	- between the twin branches of the river, downstream of Meadow Bridge
Churchend	- between the Churchend weir and bypass channels
Bonds Mill	- between the culvert and bypass channels downstream of Bonds Mill.

The Stroudwater Canal was not modelled explicitly in its lower reaches, the storage associated with this being incorporated into the associated floodplain cells where appropriate. The canal adjacent to Ryeford Saw Mills was represented as a single floodplain cell which provided storage in the event of overtopping of the embankment between the canal and the northern arm of the river. The Dudbridge Bypass channel was modelled as a river reach, using weirs to represent the residual structures at each of the locks.

It should be noted that none of the River Severn Floodplain between the Gloucester and Sharpness canal and the River Severn was modelled. However

the model is capable of identifying if flow occurs over the embankments without modelling the exact floodplain levels that occur.

The Nailsworth Stream sub-model

The Nailsworth Stream sub-model was significantly smaller than the Upper and Lower Frome sub-models, including a total of 200 sections, of which 165 were river sections. However, 45 structures were still modelled, 22 of which were bridges, in what is a relatively short reach compared to the other models. As no contoured floodplain data were available for the Nailsworth Stream, the schematisation was based on the surveyed sections. In consequence, floodplain cells were only used in one location, upstream of Dunkirk Mills, in order to represent a sequence of mill ponds.

For the majority of its lower length the river only has a single channel. Downstream of Egypt Mill however, the channel splits initially into two, and then again into three at Dunkirk Mills. Flows into the left hand channel downstream of Egypt Mills occur through a water wheel which is operated regularly as a feature associated with the hotel which now occupies the site. For the purposes of the modelling, it has been assumed that the flow in this channel is negligible compared to the flow in the main river channel. The left hand channel therefore begins downstream of Egypt Mills, close to the link channel between the two streams where it has been assumed that flows into the left hand channel may be significant. The channels recombine in the area of Critchley's works. In order to represent satisfactorily the flows in the area of Critchley's, embankments were used between the adjacent channels to allow for exchanges of water between them.

3.5 Topographical data

River section data were taken from all of the previous surveys which covered the reach, including data from the 1984, 1987, 1992 and 1994 surveys. The data were imported into AutoCAD as three dimensional xyz string data, and this then allowed the use of the KeySALMON model builder developed by Key Systems for use with SALMON-F. KeySALMON allows the surveyed data and other data digitised into the AutoCAD drawing to be manipulated into a form for direct importation into SALMON-F. Thus each model section can be labelled on screen, model cells can be constructed and the appropriate data then associated with each cell.

River sections were directly imported by identifying the spatial location of the ends of each section on the 1:2500 scale contoured plans, and from this calculating the xyz coordinate of each point on the section. These strings of coordinates were then imported into AutoCAD to give a set of three dimensional polylines. Once the sections to be used in the model had been identified, these were then inspected and where necessary they were extended to cover the full width of the floodplain by digitising further data points from the contoured plans. Where embankments and floodplains were being used, these were also digitised as polylines directly from the contoured plans.

Once all the section data had been imported, KeySALMON was used to define the cell network for the model, and to label each of the model sections. For simplicity the model sections were re-numbered using a standard system since it was not possible to produce a satisfactory labelling system which referenced the section numberings used in the previous surveys. However, the origin of any particular model section can be determined by visual inspection of the section location and model layout plans supplied.

Floodplain cell data where required were extracted by digitising areas from the contoured plans, again within AutoCAD. The storage volume in any cell is specified by a stage-area table defining the area covered by water within a floodplain cell at a particular stage.

Roughness coefficients for the model were based on an assessment of the channels being modelled. However, initially the channel roughness was set to a ks length of 0.60m in the channel, and 2.0m on the floodplain throughout the model.

3.6 Bridge data

SALMON-F uses a separate module to calculate tables of afflux for bridges within the modelled reach using the United States Bureau of Public Roads method, Reference 2. The module calculates afflux tables based on a comparison of the hydraulic properties of the bridge site with and without the bridge present. These tables are then referenced by the simulation program and appropriate values of bridge afflux obtained. A limitation of the method is that it is unable to cope adequately with supercritical flows at a bridge structure, and these were encountered in a number of places in the River Frome sub-models, primarily due to the steepness of the modelled channels. In each case where this was a problem, attempts were initially made to model the structure using the USBPR method prior to adopting an alternative representation of the structure.

The USBPR method requires information about each bridge structure to be abstracted from the structure drawings and plans of the bridge site. This includes data on the shape of the bridge abutments and piers, on the skew angle of the bridge structure to the direction of flow on both the floodplain and in the channel, and a surveyed section of the channel and floodplain itself.

In the three River Frome sub-models a total of 73 bridge structures were modelled using the USBPR method. Tables 5, 6 and 7 detail list all the structures modelled and the representation used in each case. The USBPR method was unable to cope with a number of the structures initially modelled as bridges and these were subsequently changed to an alternative structure type. The bridges where this was necessary in the Upper Frome sub-model were as follows:

Griffin Mill Footbridge
 Brimscombe Mill Pond Culvert
 Bensons Culvert
 Wimberley Mills Culvert 1
 Wimberley Mills Culvert 2
 Chalford Chairs Culvert
 Thanet House Bridge
 Red Lion Bridge.

In the Lower Frome sub-model:

Lodgemore Mills Culvert
 GWR Embankment Bridge
 Banty Ditch Culvert.

And in the Nailsworth Stream sub-model:

Erinoid Bridge
 Cotswold House Bridge

Frogmarsh Lane Bridge.

In each case except for Erinoid Bridge a discrete headloss was used to replace the bridge. Erinoid Bridge was replaced with a sluice as the use of a head loss produced an instability in the model which could not be resolved.

3.7 Structure data

Of the 197 structure complexes included in all three models, 73 were bridges, and as such the incorporation of the data for these has been discussed in section 3.6. Where culverts were present in the modelled reach these were, in the main, beyond the limit of applicability of the USBPR method since a significant headloss is usually associated with them. The representation of a culvert was therefore dependent on its characteristics. Culverts with control structures, for instance a weir or a sluice, were modelled as sluices. In the case of a culvert with a weir control, the sluice opening was set to be a constant value and the sluice width then adjusted. This then allows the sluice to have the correct area of opening and to surcharge at approximately the correct level as the culvert being modelled. Where there was no pronounced control structure at the opening, the culvert was in the majority of cases represented as a discrete headloss.

Sluice gates, weirs and siphons on the river were represented using the appropriate structure type within SALMON-F. Where a weir had crests at varying levels, or where sluices and weirs occurred at a location in combination, multiple structure elements were included within a structure cell to represent this. The locks on the Thames and Severn and Stroudwater canals which use weirs to impound the correct upstream level of water were all represented as weirs. However, in a number of cases a low level sluice was also incorporated into the structure cell for the weir in order to lower the upstream water level to that which was observed as being "normal". This was necessary as in some reaches the weir at the upstream sill of the lock is at a high level, but the openings by which the lock would have been filled when in use are at a lower level and provide the normal drainage for the reach.

Initial discharge and drowning coefficients for each structure were derived by an assessment of each based on site visits, photographs and experience of coefficients used in previous modelling studies. In effect each structure was grouped into a set of similar structures, and each group was then ranked and default coefficients assigned to the group. For instance, all structures in group 1 would be expected to have standard discharge coefficients (a C_d of 1.0), all structures in group 2 a coefficient of 0.9 and so on. This system potentially allows any calibration data which is available for one structure to be extended to all similar structures being modelled.

Sluice openings were identified for each structure by inspection of the survey drawings and of the structures on the ground. For the purposes of the modelling, the maximum opening and the apparent normal opening were identified, together with whether or not it was feasible to operate the gate. Tables 8, 9 and 10 give the sluice gate openings used in each of the models. The "gates" which are fixed represent structures which it is either not feasible to operate, primarily due to the dereliction of many of them, or which represent culverts and other features for which an orifice type flow equation is suitable. The maximum and minimum openings for moveable gates are also identified.

Embankment structures were incorporated in locations where they were observed or known to exist. These included culverts through embankments at road and rail crossings of the valley, as well as links between the river and canal

system where these could be clearly identified and were thought to be significant. Table 11 gives a list of the culverts and other embankment structures included in the models.

3.8 Hydrometric data

The Upper Frome sub-model

Inflows for the sub-models were required at all upstream reach ends, where tributaries entered the main channels and as lateral inflows along particular reaches. Figure 3 shows the ten Frome sub-catchments for which hydrological estimates were produced for the calibration and design events. The Upper Frome catchment provides the upstream input to the River Frome at section RFA_389. A tributary point inflow is included for the Toadsmoor Stream at Wimberley Mills, between sections RFA_278 and RFA_279. The upstream boundaries of the Thames and Severn Canal reaches have nominal inflows at SCC_070 and at SCB_024 in order to ensure that there is always some flow along these reaches. The lateral inflow of the Upper Middle Frome catchment is proportioned along the various reaches between RFA_175 and RFA_278 using scaling factors based on the lengths of each reach. These scaling factors are necessary as a lateral inflow can only be incorporated along a single reach, and cannot bridge across junctions between reaches. The scaling factors applied are given in Table 12.

The downstream condition for each of the model downstream boundaries is provided by a rating curve. For the River Frome at section RFA_175 this is based on the conveyance table used by the model for this section. For the two downstream ends of the canal reaches, the rating allows a flow at all levels equivalent to the constant inflow included at the upstream end. As a result the canal reaches will cause ponding at their downstream ends of any additional flow and this will then overflow as appropriate once all available storage is filled.

The Lower Frome sub-model

The Lower Frome sub-model takes as its upstream boundary at RFA_175 the predicted flow from the Upper Frome sub-model at the same section. Similarly the flow upstream of the Nailsworth Stream outfall weir at section NSA_002 is provided by the flow hydrograph taken from the Nailsworth Stream model at the same point. The upstream inflow for the Dudbridge Bypass channel at SCA_016 is provided by the Slad Brook hydrograph, and the Painswick Stream is then specified into the same reach of channel as a tributary inflow between SCA_011 and SCA_012. Similarly the Randwick Stream forms a tributary inflow between SCC_005 and SCC_006. These are the main inflows to the Lower Frome sub-model.

The downstream boundary for the Lower Frome sub-model is provided by the River Sever downstream of the tide flap in the River Sever embankments and close to the Epney level gauge. This is a tidal reach of the River Sever and as such the stage boundary is specified directly to the model as a hydrograph.

Lateral inflows to the model are provided from both the Lower Middle Frome and Lower Frome catchments and, as for the Upper Frome sub-model, these were proportioned throughout the appropriate reaches of the model using scaling factors based on the relative reach lengths, Table 12. Nominal boundary inflows were also provided at RFM_003 and RFX_007. RFM_003 is the upstream end of the channel which flows out from under Stanley Mills but which now appears to carry no flow through the mill. The inflow is provided as a means of including

this reach of channel in the model. This is also the case for RFX_007, which is the upstream end of the old River Frome adjacent to the Nailsworth Stream where the Dudbridge Culverts now carry the diverted River Frome.

The Nailsworth Stream sub-model

The Nailsworth Stream sub-model takes as its upstream inflow the hydrograph for the Nailsworth Stream catchment upstream of Egypt Mill at NSA_124. The Lower Nailsworth catchment is specified as a series of lateral inflows to the various model reaches, with scaling factors as shown in Table 12. A nominal inflow is given for the upstream end of the reach leading from the Egypt Mill water wheel, NSD_024, as this does not necessarily carry flow at all times, and as such would cause a failure of the model otherwise. The downstream boundary is given as a stage hydrograph downstream of the Nailsworth Stream outfall weir, but with a constant level. This is necessary as the Nailsworth Stream sub-model has to be run prior to the Lower Frome model, so no information on stage downstream of the weir is available. However, due to the height of the outfall weir it is reasonable to assume that the weir is in free-flow conditions for most of the time and therefore the inflow from the Nailsworth Stream is independent of conditions in the River Frome.

3.9 Initial conditions

Due to their complexity and size, attempts to initialise the sub-models using water levels calculated using normal depth proved unsuccessful. The initialisation was therefore undertaken by preventing flow over the model embankments (by setting their discharge coefficients to be zero), and then specifying a single water surface throughout the model which was above the level of the highest channel section (RFA_389). A simulation was then run which gradually increased the discharge into model boundaries, tributaries and lateral inflows to that required at the start of the events to be modelled, whilst at the same time gradually lowering the downstream tailwater level. This allowed the model to achieve a stable state for the required discharge, thereby giving an in-channel "cold" initial condition.

As floodplain cells had been used to represent Baker's Mill reservoir in the Upper Frome sub-model and Dunkirk Mills ponds in the Nailsworth Stream sub-model it was then necessary to allow flow onto the floodplains and generate a second initial condition which included water in these floodplain cells. This was achieved by setting the embankments to have a low coefficient of discharge, allowing a small amount of flow over them, and then running this simulation for sufficiently long to allow the water levels to equalise between the channels and the floodplain. This then gave a "warm" initial condition for the purpose of starting the simulations. As a result, the Upper Frome and Nailsworth Stream sub-models require an initial simulation in order to produce a suitable initial condition, whilst the Lower Frome sub-model can be initialised directly.

4 Hydraulic model calibration

4.1 Calibration events

Three calibration events were specified for the model study, these being flood events occurring on:

- (i) 5 January 1994
- (ii) 30 May 1979
- (iii) 18 December 1965.

The January 1994 event is the smallest of the three events, being not much more than bankfull at most locations in the model. The recorded peak flow at Ebley Mill was $11.8 \text{ m}^3/\text{s}$ on 5 January 1994. However, the event was the largest since the installation of the continuous level recorders and the availability of this data was significant. The overall availability of data for this event is shown in the top part of Table 13. Continuous level data were obtained from five of the six recorders, the sixth being outside of the modelled area on the Painswick Stream. Peak level data had also been obtained by NRA-ST from eight recorders which had been read on either the 5 January or 23 February 1994. Flows and levels at Ebley Mill were also available for the event.

The 30 May 1979 event is the largest event for which flow data are available at Ebley Mill, a peak flow of $19.2 \text{ m}^3/\text{s}$ having been recorded, equivalent to a bankfull event in this part of the river. As such, it was thought important to use this event as part of the calibration procedure, despite the absence of any other level data elsewhere on the River Frome or Nailsworth Stream.

The December 1965 event is the largest on record for the River Frome for which there are any observed level data available, and there were a large number of observations made on the river system during the flood. However, the event predated the installation of the level recorder at Ebley Mill and no peak level was collected at this point. As a result, the peak flow for the event is unknown. A list of locations where level data were collected is given in Table 13.

4.2 Tidal water levels at Framilode

Level data for the January 1994 event at the Epney gauge on the River Severn were supplied by NRA-ST for use in modelling the 1994 flood event. These data were supplied in digital format and directly imported into the hydrometric data files. At the time of the 1965 and 1979 events the Epney level recorder had not been installed and as such no level data for the River Severn were available. Whilst it would have been possible to obtain level data for the downstream Lower Frome sub-model boundary by running the River Severn model with the observed flows in the river and observed tide curve at Avonmouth, this was discounted as being outside of the scope of the current study. As such, the 1979 and 1965 events were both simulated with a constant water level in the River Severn, allowing a free outfall through the tidal flap on the River Frome at Framilode.

4.3 Fluvial inflows

The fluvial inflows for each model for each calibration event were taken directly from the flow hydrographs derived in the hydrological component of the study. During the actual calibration there was some modification to the timings and to the baseflows of these hydrographs, but these alterations are discussed in full in the appropriate sections. The lateral inflow hydrographs were proportioned as discussed in section 3.8.

4.4 Calibration of Ebley Mill gauging station

In order to ensure that the model accurately modelled the relationship between stage and discharge at Ebley Mill weir, calibration was undertaken of a sub-model of the Ebley area. This extended from downstream of the confluence of the River Frome and Nailsworth Stream to downstream of Ebley Mill bridge. This sub-model was calibrated against two sets of flows and levels:

- the May 1979 flood event

- the flows and levels recorded from the Ebley physical model previously in the study.

The work was undertaken by producing a small sub-model of the Ebley area, extending between sections RFA_133 and RFA_143 and neglecting the Dudbridge Bypass canal, but otherwise identical to the same area in the Lower Frome sub-model. Ebley Mill weir was split up into three separate weir elements, and these were given standard discharge coefficients. The recorded flow for the May 1979 event or steady flows equivalent to those modelled in the physical model study were then used as the upstream inflow for the model. The level at RFA_139 was then matched to that recorded for the event by adjusting the discharge coefficients for each of the three weir elements.

Calibration for the 1979 event was carried out by using the recorded flows at Ebley (predicted by the NRA rating from observed levels) as the model input, whilst the downstream tailwater level was fixed at a constant 29.80m. This gave free flow conditions over the weir throughout the event and this simplification can be accepted as the physical model showed no signs of drowning of the weir until flows in excess of 50 cumecs begin to surcharge the bridge downstream of the weir. The embankment coefficients for the left bank around Ebley weir were given a discharge coefficient and drowning ratio of 0.40, values shown in a number of previous studies to provide an acceptable representation of flow over embankments. The weir flow coefficients for the three elements of the weir were then adjusted until the predicted level hydrograph for the 1979 event matched that observed at the station. A calibration to within 20mm was achieved throughout the event, with the peak level being matched exactly. The stage hydrograph from this calibration is shown in Figure 5.

Calibration for the steady flows modelled with the physical model was carried out using a stepped flow hydrograph at the upstream boundary, which gave a series of steady flows each of eight hours duration, whilst the matching physical model tailwater levels were applied to the downstream boundary. No further adjustment of the weir or embankment coefficients was carried out during this calibration, and the results are shown in Table 14. These show that, except at a flow of 20m³/s where the predictions differ by 70mm, the physical model and SALMON-F model agree to within 50mm for flows up to 50m³/s. This is sufficient to cover all the flows to be modelled within this study (ie up to the 150 year return period event). The larger difference at the flow of 20m³/s occurs at approximately bankfull, where the approximations within SALMON-F relating to the modelling of embankments (a single mean level is calculated from the input data) have greatest significance.

4.5 January 1994 event

For the January 1994 event, observed level data were available at the following locations:

Upper Frome sub-model

- Thrupp (C3 continuous level gauge)
- Golden Valley (C4 continuous level gauge)
- Brimscombe (M6 peak level gauge)
- Chalford (M7 peak level gauge)

Nailsworth Stream Model

- Persimon Homes (C1 continuous level gauge)
- Egypt Mill (C5 continuous level gauge)
- Woodchester (M10 peak level gauge)

Lower Frome Model

- Dudbridge Weir (C2 continuous level recorder)
- Ebley Mill weir (gauging station)
- Ryeford (M4 peak level gauge)
- Eastington (M1 peak level gauge)
- Wallbridge (M5 peak level gauge)
- Upper Framilode (M8 peak level gauge)
- Saul (M9 peak level gauge).

These levels are detailed in Table 15. There is some doubt attached to the peak levels recorded in the upper catchment, since a slightly higher event was recorded in some locations subsequent to that modelled for the calibration. The levels were read on the day of the peak of the calibration event, 5 January 1994, at an unknown time, and also on 23 February. At a number of the peak level recorders, the peak reading on 23 February exceeded that of 5 February, implying a second, greater event between the two dates. However, an alternative possibility is that the peak levels were collected prior to the peak of the event, and therefore that the second level may refer to the peak of the actual calibration event. Additionally, the level record at the Thrupp and Golden Valley gauges shown in Figures 8 and 9 does not show a hydrograph with a distinct peak as such, but more a continuously increasing flow in this part of the river throughout the event. There is some doubt with regard to the M9 and M8 gauges at Saul and Framilode which, though both read on the same day, have a level difference of 1.250m along a reach of c.700m in length, and which is controlled by a structure.

The initial calibration for this event showed that the high underlying baseflows were not being predicted by the hydrological model. In discussion with NRA-ST, it was decided to raise the baseflow component of the hydrograph, though without altering the peak of the event. This was achieved by identifying the shortfall in baseflow at Ebley Mill weir, around 7m³/s, then proportioning this additional flow required throughout the catchment based on the size of the baseflow predicted by the hydrological study.

Additionally, from the timing of the peak at Dudbridge and at Egypt Mill it was clear that the hydrological inputs for the Nailsworth Stream, Painswick Stream, Slad Brook and Ruscombe Brook all needed to be retarded slightly in order for the time of the peak levels at Egypt Mill and Dudbridge Weir to match with those observed. As such, the inflows for the Slad Brook, Painswick Stream and Ruscombe Brook have been delayed by 2.5 hours, and those for the Nailsworth Stream and its lateral inflow by 1.5 hours. This modification was then carried into the timings for the May 1979 and December 1965 calibration events and the design events.

The calibration results at the continuous level recorders and at Ebley Mill for the 1994 event are shown in Figures 6 to 12, and a comparison of peak levels at all sites is given in Table 15. Accepting the nearest value for locations M6 and M5, then all of the sites except for M7 and M9 are calibrated to within 80mm, with the

majority calibrated to 50mm or better. These results are discussed in more detail in section 4.9.

4.6 May 1979 flood event

For the event occurring on 30 May 1979, observed data is only available in the form of flows and levels at Ebley Mill, and these are plotted against the model predictions in Figures 13 and 14. However, levels at the calibration points used for the 1994 event are also given for comparative purposes in Table 16.

The calibration plots show a peak stage at Ebley of 32.008m compared with a recorded peak of 31.923m, a difference of 85mm. This difference must be attributable to the overprediction of the peak discharge at the site as the previous calibration of Ebley Mill weir gives an exact stage match for the recorded discharge. The peak flow prediction by the model is 21.3 m³/s compared with the rated flow of 19.2 m³/s, an overprediction of c.10%. The shape of the hydrographs is, however, reasonably good although the high baseflow component which persists after the peak of the event is not represented. Because of the limited amount of data for this event, no adjustments of model parameters were made and this event can therefore be considered as purely verifying some of the model characteristics for flows up to bankfull at Ebley.

4.7 December 1965 flood event

The December 1965 event differs from the other two calibration events in that there are a large number of level observations on the River Frome for the event, but no record of the flood hydrograph exists. The model inflows are therefore purely based on the FSR modelling of the rainfall for the event as discussed in Chapter 2, without any flow validation data. The predicted stage and discharge hydrographs at Ebley Mill are shown in Figures 15 and 16, and these indicate a distinct triple peaked event. The level observations have been extracted by NRA-ST from their level books, though the quality of a number of these is unknown. The observed and predicted levels for this event are given in Table 17. It should be noted that only one adjustment was made to the model to account for possible changes in the condition and operation of structures since 1965. This was at Meadow Mill where a significantly higher headloss coefficient was used to represent the presence in 1965 of the mill sluices which have now been removed.

At the majority of locations for which observations are available, water levels are matched to within 0.16m which in view of the uncertainties in the input hydrographs, quality of level records and the date of the event is reasonable.

4.8 Calibration parameters

The final values of the roughness and structure coefficients are listed in Tables 18, 19, 20 and 21.

Channel roughnesses were increased from the initial values of a ks of 0.6m in the channel and 2.0m on the floodplain where necessary in order to reproduce observed water levels. However, as discussed in section 4.9, in much of the model water levels were found to be insensitive to roughness and were more dependent on local structure coefficients. Floodplain roughnesses were set to a ks of 2.0m throughout the model.

As with roughness values, structure discharge and drowning coefficients were adjusted where appropriate to reproduce observed water levels. In general structure coefficients were not altered unless the changes were justified.

Changes in discharge coefficients from the default values were made where approach conditions were thought to be particularly poor, for instance at very narrow side sluices.

Embankment coefficients were set throughout the model to have a discharge coefficient and drowning coefficient of 0.40. This is a value found in a number of studies to represent flow satisfactorily across an embankment modelled as a broad crested weir which is the representation used within SALMON-F.

4.9 Discussion of calibration results

For the 1994 calibration event peak water levels are within 70mm throughout most points in the model. The unsatisfactory calibration at M7 may be due to the representation of the supercritical or near-supercritical flow which occurs at this site, combined with the complex channel geometry where the river turns through 90 degrees downstream of the gauge. The level at M9 appears to be inconsistent with that at M8, indicating that the peak level recorded is either inaccurate, or that it relates to a previous high level in this tidally influenced reach of the Lower Frome. It seems improbable that a water surface slope of 1 in 460 could be obtained in a reach of the river where levels are in the backwater of the tidal outfall.

For this event the model also shows a general tendency for the model to produce a limited attenuation of the flood as it passes down the model and as such the predicted peak occurs too early by about 1 hour and is over the observed peak level by 58mm, Figure 12. The discharge peak exceeds that calculated from the Ebley rating by about 1 m³/s which represents an overestimate of 10%. The 1979 peak is overpredicted by a similar amount, but the timing of the peak is considerably better, Figure 14. In the case of both events the raised baseflow occurring after the peak of the event is not found in the model. This is however a function of the limitations of the hydrological study with regard to modelling baseflows and as such is discussed in detail elsewhere.

The 1965 event in theory provides the most valuable set of data against which to calibrate due to this being a major flood event. This has to be qualified by reservations over the quality of the level readings which were collected either during or after the flood event; over changes in the river system which have taken place over the 30 years since the event occurred; and over the lack of calibration data against which to compare the flows being modelled. Of these, changes in the river system, and in particular in the condition of structures along the river system, many of which are now abandoned, are of the greatest concern. As such, where predicted water levels have differed significantly from the observed, then possible causes for this have been sought prior to carrying out any adjustment of the model parameters. The predicted level is outside of the recorded level by more than 150mm in a number of locations, and the locations of these and possible causes are considered below.

RFA_331 - d/s Red Lion Pub

Supercritical flow occurs at this point, and the model has been simplified in terms of the representation of the bridge in order to cope with this. The predicted level is, however, conservative (+0.542m).

RFA_271 - u/s Boume Mill

This is a complex area where the exact location of the level is unknown, but is downstream of a structure which is now disused, and is represented as such in the model. It is possible that operation of this structure would have produced a significant increase in water levels immediately downstream of it.

RFA_232 - u/s Phoenix Mills

The level here is underpredicted, possibly due to operation of a now disused sluice adjoining the weir structure.

RFA_184 - u/s canal syphon

RFA_183 - d/s canal syphon

The levels both upstream and downstream of the syphon are underpredicted for unknown reasons. The upstream may possibly be due to blockage of the syphon. Downstream the level could not be matched using roughness coefficients and the reason for the discrepancy is unknown.

RFA_182 - u/s Railway Mill

The location of the recorded level at this site is unknown and the structure is now dilapidated. The lower level may be a function of the blockage of the sluice parts of the structure which has now occurred.

RFA_175 - Wallbridge

RFA_172 - Wallbridge

Both levels in the vicinity of Wallbridge are below the observed levels. The level at RFA_172 may be unreliable, whilst the exact location of the level assumed to be at RFA_175 is unknown. The steepness of this reach of the river means that supercritical flow is also present and this may also be a factor in the predicted and observed level discrepancy.

RFA_104 - u/s Stanley Mills

The level at this site was taken immediately upstream of the sluices and weirs, and as such may be in structure drawdown and as such is lower than that predicted by the model where the drawdown is assumed to occur within the structure cell. The level is hard to reconcile with that at RFA_106 upstream of Stanley Mills bridge which the model matches satisfactorily and which would imply an improbable water surface gradient.

RFA_087 - d/s Stanley Downton

The level at this point is underpredicted by 0.592m for reasons unknown. This reach of the model is insensitive to roughness coefficients and is also outside of any structure backwater. The level may be a function of a lack of discharge within the southern channel, possibly due to the assumption that Stanley Mills sluices are now inoperable.

RFA_054 - u/s Millend Mills

RFA_053 - d/s Millend Mills

Both the levels at Millend appear excessively high. The level downstream of the mill may be a function of the blockage of the footbridge in the reach downstream. However, the upstream level would imply overtopping of a 500m stretch of bank which has a level 0.4m below that of the observed level. This seems unlikely as the floodplain onto which the water is spilling would require a depth of water of over 2m in order to drown the flow over the embankment.

RFD_061 - Upper Mills Bridge

The exact location of this level is unknown, and it is in the vicinity of a bridge which has been replaced recently in connection with the new Ryeford Bypass.

RFD_033 - d/s Lower Mills

This observation is downstream of the now disused side sluices at the mill complex. Operation of these sluices may have produced a different distribution of flow around Lower Mills which may account for the higher level in this channel than predicted.

CELL 52 - d/s railway bank

This level was taken in the abandoned central channel of the Frome almost immediately downstream of the railway. The level predicted by the model represents an average for the cell in which the observation was taken. A significant water surface slope along the abandoned channel may therefore result in the observed level being significantly higher than the model prediction.

CELL 81 - d/s Ryeford Road

This level was taken close to the Ryeford Road in the vicinity of the railway, and is associated with flow through the Ryeford Road bridge. The flow is predicted by the SALMON-F model, but as in the case of the railway embankment above the model gives a single level for the whole cell downstream of this point. Additionally there have been significant improvements in the bridge and culvert arrangements for water on the north side of the railway in association with the new road bypass which follows the line of the railway and these may have a significant effect on water levels in the upper part of the Banty Ditch.

CELL 89 - Ryeford Saw Mills

CELL 90 - Ryeford Saw Mills

Both water levels on the floodplain upstream of Ryeford Road occur at the extreme edges of floodplain cells, for example close to the river bank. This implies that they are likely to be higher than the model predictions as in the cases discussed above due to the single water level predicted by SALMON-F for each cell.

CELL 85 - Ryeford Canal

The storage cell representing the canal in this reach is purely present in order to provide an approximate representation of the storage available if the bank between the river and canal upstream of Ryeford Saw Mills is overtopped.

Changes in water level which may be a function of flow into the reach of the canal from elsewhere or due to other links between the canal and river which are not included in the model are therefore not represented.

A general tendency observed in all three sub-models was an insensitivity to roughness coefficients used for the channel reaches and also for the floodplain sections. This is primarily thought to be a function of the steepness of the majority of reaches, though also in many locations roughness effects are masked by the backwater effect from structures. As such, roughness values have in the main remained at the default values to which they were set in the initial phases of the modelling. However, it has been observed in some reaches, in particular the smaller channels, that small increases in discharge can produce a significant increase in modelled levels. This suggests that where flow splits occur in the model, in particular in the Ryeford area, that level predictions are particularly sensitive to the volume of water flowing along each channel.

5 Design event tests and floodplain mapping

5.1 Introduction

The primary aim of the Frome study was to produce maps defining the extent of the Frome floodplain for a series of six design flood events. These represent estimates of the 5, 10, 25, 50, 100 and 150 year flood events on the river system. The inflows for the events were produced in the hydrological study as described in Chapter 2, with the slight modifications in timing described in Section 4.5. The tidal hydrograph for the events was based on results taken from the River Severn model where the standard 6.7m repeating spring tide used throughout the River Severn study was simulated with the mean flow in the fluvial part of the river. This gave a tidal hydrograph at Framilode which repeats between 5.00m and 7.49m and which was used as a downstream condition for all of the design event tests. This hydrograph is shown in Figure 29.

There was no change to the model parameters between the final calibration of the model and the design events. However, it was assumed that all sluice gates which were physically capable of being operated would be fully open during the design events, or in the case of the lower return period events would be open as far as necessary to prevent upstream flooding.

5.2 Test results

From the simulation of the six design events, peak levels at every model section and floodplain cell were extracted giving a total of over 1000 points with predicted peak water levels. Additionally, peak flows at every river, floodplain, embankment and causeway section were also extracted from the model. From this information it was then possible to draw up the following presentations of the modelled data.

- An annotated table of peak flow and level at every river section. This is presented in Appendix 1, together with the peak water levels for each floodplain cell. Selected peak levels for the design events are presented in Table 22, along with the peak total flow predicted at Ebley Mill.
- Long profiles for each model reach of maximum water level, bank levels and minimum bed level. These were produced using AutoCAD and plotted at a scale of 1:5000 horizontally and 1:50 vertically. These plots are presented in Volume 3 of the report.

- 1:2500 scale contoured floodplain maps of the River Frome. The 100 year return period flood event is presented on one set of maps as Volume 4 of this report, and the 5, 10, 25, 50 and 150 year events are presented as a further set of maps in Volume 5. For the 100 year event, properties at risk of flooding have been identified from their threshold levels and are identified on the maps. A list of all the threshold levels identifying the properties at risk of flooding is presented in Appendix 2.

5.3 Method of floodplain mapping

The floodplain maps were produced by combining a number of separate sources of information. Firstly, contoured plans of the River Frome at 1:2500 scale were provided by NRA-ST. These had been produced from three separate aerial surveys of the river and from a ground survey of the reach above Chalford. The peak water levels at every river section were then plotted onto these maps to produce an envelope of channel and adjacent floodplain peak flood levels. The peak water levels in each floodplain cell were then identified and plotted onto the same set of maps. As each floodplain cell is assumed by SALMON-F to have a single constant water level, it was then necessary to interpolate a continuous water level surface from the level information. This then gave an envelope of flooding on the floodplain. The final refinement was to identify every location where flow onto the floodplain was occurring and to extend the flooded outlines to include these areas as part of the floodplain.

One set of maps was produced for the 100 year event by this method whilst a second set was used to depict the flooded outlines for the other events. For the 100 year flood event, maps indicating property threshold levels were supplied by NRA-ST together with a listing of the addresses of each mapped property. From this information, properties at risk of flooding in the 100 year event were identified as accurately as possible. The process was complicated by discrepancies between the information on the list of threshold levels and information on the threshold maps. As such, some properties at risk of flooding may not appear on the address list. Additionally, where properties are protected by features such as walls then they may be indicated as at risk of flooding as without full surveys of the protection it is not possible to identify whether they may be protected from channel or floodplain water levels.

For the Nailsworth Stream no information was available on general floodplain levels and threshold levels so it has not been possible to prepare maps of flood extent or lists of flooded properties. The results are therefore presented purely in tabular form and do not form part of the following discussion.

5.4 Discussion of results

The following discussion of the results of the design event testing has been structured on a reach by reach basis for clarity. The reaches are presented in a downstream to upstream order to match the order of the floodplain maps.

Wheatenhurst Sluices to A38

This reach is characterised by embankments on both sides of the river. The results of the design tests indicate that neither embankment is overtopped by any of the design events tested. The right bank floodplain is dry for the 5 year event but for the larger magnitude events flow occurs through the culverts on the right bank of the A38 and the floodplain then acts purely as floodplain storage. For the 100 year event and over the levels on the floodplain are sufficient for water to reach the Stroudwater Canal though this ends in high ground at both ends. It has

been assumed for the design tests that the sluice carrying Walk Rhine under the Frome will be closed to prevent flooding of the left bank floodplain from the Walk Rhine. A feature of this reach is the area of dry ground between the A38 culverts and the river upstream of Fromebridge, which results from the line of higher ground running from the A38 along the floodplain.

A38 to Meadow Bridge

Meadow Mill is the cause of a significant headloss for all the events modelled. This has the effect of forcing flow over the embankments upstream and onto the floodplain for events exceeding 5 years in return period. Localised flooding occurs for the 10 year event, whilst for the 25 year event the whole of the left floodplain between the A38 and Meadow Bridge is flooded. Flow onto the right floodplain upstream of Meadow Mill is prevented from passing down the floodplain by the higher ground that the mill buildings stand on and as such right bank flooding is restricted to upstream of Meadow Mill and downstream of the M5 embankment. The mill buildings themselves are at risk of flooding in the 100 year event. The caravan park immediately downstream of Meadow Bridge is just at a sufficiently high level not to be flooded by the 100 year flood event but is threatened by the 150 year event.

Meadow Bridge to Railway Embankment

This reach is characterised by the splitting of the river into two main southern and northern channels. However, in the vicinity of Churchend a number of smaller channels are also present. The splitting of the channels in this way produces a wide central floodplain which is significantly lower than normal water levels in the two channels. As a result, this central area is flooded for all the design events tested. Flow onto the floodplain comes from upstream of Bonds Mill, from upstream of the Market Garden Weir, and from locations on the south channel where the banks are lower. Once on the central floodplain, flow passes under Millend Lane via culverts and returns to the northern channel downstream of this point. For events of 50 years and over Millend Lane itself is overtopped. The buildings at Bonds Mill are at risk of flooding for the 100 year event as are those at Beards Mill.

Railway Embankment to Downton Road

Upstream of the railway the river maintains two separate channels, but the width of the central floodplain decreases considerably. Bridgend Mill is the major feature on the north branch of the Frome and for all the design events flooding occurs upstream of the mill on the right floodplain. This progressively increases and for the 100 year event properties at the mill are at risk of flooding. The northern road into the mill forms an obstruction to flow around the north of the mill buildings.

For all the events, flow occurs onto the central floodplain from both channels upstream of the railway embankment. Additionally, for the 100 and 150 year events flow will cross Downton Road itself and will flood the upper part of the floodplain.

Downton Road to Ebley Refuse Tip

This reach sees an expansion in width of the central floodplain, together with the presence of a third channel, the Banty Ditch, which runs between the north and

south channels. The Banty Ditch is significantly lower than the other two channels and this forms the line of flooding along the floodplain. Downstream of Ryeford Road there is no flooding from the south channel onto the floodplain for any of the events modelled, though immediately downstream the flood envelope links with the relict channel leading from Stanley Mills. Flow from the north channel onto the floodplain occurs from upstream of Upper Mills and from the area between Upper Mills and Bridgend Kennels. Flow also occurs from between Ryeford Saw Mills culvert and the disused railway (now a new road) which then links through a small culvert to the Banty Ditch. This is reflected in the pattern of flooded properties along the lower half of the reach, all of which lie along the north channel. The exceptions to this are two properties at Stanley Mills which are potentially at risk of flooding.

Upstream of Ryeford Road, flooding of the central area is more extensive and flow occurs from both of the river channels. The overtopping becomes more extensive for each of the design events resulting in a greater depth of flooding on the central floodplain. For the 25 year design event and over flow occurs along the line of the old railway through Ryeford Road and onto the central floodplain downstream. The representation of this in the model has been based on existing data on the railway and floodplain layout as it was understood that the new road was to maintain the existing ground levels. If this has not been the case then the construction of the new road may be significant in altering the flow patterns and depths of flooding.

Ebley Refuse Tip to Dudbridge Culvert

The refuse tip at Ebley restricts all the flow in the Frome to a narrow channel with no floodplain prior to splitting into the north and south channels downstream of this point. Upstream of the tip, the channel briefly splits in two for the mill and bypass channels at the Com Mill itself before returning to a single channel throughout the reach to Dudbridge. The structures at Ebley Com Mill result in flow being forced onto the left floodplain upstream of the mill for all the design events, though for the 5 year event this acts purely as storage. For the other events flow is able to bypass the structures via this route. Flow onto the right floodplain occurs for the 10 year event and over, though this is unable to bypass the mill due to high ground to the north. For the 100 year event the buildings around the Com Mill are at risk of flooding.

At Ebley Mill the channel is again restricted by the mill buildings and the railway though bypassing of the gauging weir at Ebley occurs for flows of 25 year return period and over. Flow occurs over the river bank over the left bank adjacent to the confluence of the river with the Dudbridge Relief Channel. Flooding of the playing fields between the canal and the river occurs for the 50 year flood event and over.

Dudbridge Culvert to Bath Road Bridge

Between Dudbridge and Bath Road the Frome is generally tightly constrained to a single channel with no floodplain. Flooding of Redler's works is possible for the 50 year event and over though the mechanics of the flooding are difficult to represent within the model. Dependent on how water may flow through the Redler's site then other properties adjacent to the Dudbridge Road may also be at risk. The flooding occurs from a low point on the right bank at the upstream end of the works. The river is then constrained again until Fromehall Mill is reached where the river flows through a complicated series of culverts and

structures. Flooding of the area to the north of the mills occurs for the 25 year event and over from the upstream mill pond. A hydraulic link between the canal and the river has not been included in the model at this point though it is possible that water levels in the canal may be high enough to overtop the canal bank into this area.

At Lodgemore Mills, water levels in the mill pond appear not to exceed the level required for flooding of the mill buildings. However, potential flooding of one of the buildings in the 100 year flood has been indicated as the threshold level is below the level of the upstream water level although it is unclear where the threshold for the building is. Upstream of Lodgemore Mills flooding occurs of the depot to the north of the river for the 100 year event and over. This is primarily due to the poor culvert opening at the entrance to Lodgemore Mill Pond.

Bath Road Bridge to Thames and Severn Canal Syphon

This is one of the steepest reaches of the model and flow is near supercritical along much of the reach for all the events. Some inaccuracy in the water level predictions is therefore likely. Flooding of the properties on the left bank upstream of Bath Road Bridge is predicted for the 100 year flood event but the rest of this reach is deeply incised and there is no risk of other flooding for any of the events.

Thames and Severn Canal Syphon to Brimscombe Pond

Upstream of the syphon, some interaction occurs between the canal and the river for the larger events. However, the river is again within a deep channel until upstream of the housing estate at Bowbridge. The river channel then becomes noticeably smaller and begins a series of frequent bifurcations around the many mill buildings and structures which are present. In general, the channel splits produce a central area of undeveloped floodplain into which the larger floods can spill. However, the model identifies that localised properties are at risk of flooding. For the 100 year event these include works at Stafford Mills, Griffin Mill and Phoenix Mill. One of the industrial units upstream of the caravan park at Thrupp is also at risk of flooding for the 100 year event.

Brimscombe Pond to Wimberley Mills

At Brimscombe Pond flow occurs onto the left bank floodplain from upstream of the culvert leading into the pond for events of 25 year return period and over. This results in the potential flooding of a number of properties in this area. The river is then constrained through a number of culverts and bridges until Brimscombe Port is reached. Here there is flooding for the 100 year event of the Benson's site, though there is no flooding from any event of the Brimscombe Port Industrial Estate. This is protected by a line of slightly higher land and walls along the right bank of the river.

At Bourne Mills flooding occurs for the 100 year event and there is a significant area of flooding upstream of this point where flow from above the mill control structures spills across the downstream floodplain.

Wimberley Mills to Chalford Industrial Estate

Immediately upstream of Wimberley Mills, flooding occurs of the site car park for the 100 year event and over, though levels are not sufficiently high to cause flow

overland and through the mill buildings. Between Wimberley and Chalford two areas of localised flooding then occur. At St Marys Mill, flow occurs from upstream of the culvert at Ivy Cottage into the low lying area between the river and the canal but this does not threaten any properties. Similarly, flooding occurs upstream of St Iles Mill where the channels split but no properties are at risk. For the 100 year event, Clayfields Mill adjacent to the canal may be at risk of flooding due to a low threshold level.

At Chalford Industrial Estate the river passes under the site through various culverts and control structures, the main one of which is at the upstream end of the site. Water overtops the sluice headwall for the 100 year event and over and a number of industrial units are then at risk of flooding.

Chalford Industrial Estate to Whitehall Bridge

The model identifies a number of properties at risk of flooding in the 100 year event around Chalford Bottom and Rack Hill, in particular along the High Street. Upstream of this point the river takes on a rural characteristic and there are a limited number of properties affected by potential flooding. The right bank floodplain upstream of Golden Valley Lock is flooded for all events, though upstream of Ashmeade House the bank levels are sufficiently high to prevent flooding. Two properties along this reach are at risk in the 100 year event, including Ashmeade House.

Upstream of Bakers Mill the river interacts with Bakers reservoir and in the 100 year flood event Bakers Mill itself is threatened with flooding. The culvert at Puck Mill is then the last significant structure on the river and this acts as a major constriction due to its small size. As a result, flooding occurs of the whole of the floodplain upstream of this point and this results for the 25 year event and over in the canal carrying some of the flood flow.

6 Sensitivity tests

6.1 Introduction

In order to identify the sensitivity of the model to changes in flow and structure coefficients a set of 4 sensitivity tests were carried out. The four tests were as follows:

- 1) Increase in flow hydrographs by 10%
- 2) Increase in flow hydrographs by 20%.
- 3) Reduction of structure coefficients by 10%
- 4) Reduction of structure coefficients by 20%

These modifications were modelled with the 100 year flood event and the results tabulated in a similar way to the design event maximum levels. This table is presented in Appendix 3. Water level increases are discussed in section 6.2 for the flow sensitivity tests whilst Table 28 gives a list of model structures where significant increases in upstream water level occur for the structure coefficient sensitivity tests. These are then discussed in section 6.3.

6.2 Sensitivity to flows

For the purposes of the flow sensitivity tests every inflow was increased by 10% or 20% throughout each hydrograph for the 100 year design event. This gave an increase in peak flow at Ebley Mill of $2.3\text{m}^3/\text{s}$ for the 10% increase and $4.9\text{m}^3/\text{s}$ for the 20% increase over the original peak flow for the 100 year event of $37.4\text{m}^3/\text{s}$. The table presented in Appendix 3 was then produced comparing levels at each model section and cell for the existing 100 year design event and the 100 year event with either a 10% or 20% increase in flow. From this table, locations where the water level increase exceeded 0.10m were identified, this being considered a significant increase for these purposes. The following discusses locations where water level increases exceed this limit on a reach by reach basis.

Wheatenhurst Sluices to Fromebridge Mill

This reach of the model shows an almost constant level increase between the two structures. For the 10% test, the increase in water level only exceeds 0.10m at section RFA_020. However, for the 20% test the level increase is between 0.09m and 0.29m throughout the reach.

Fromebridge Mill to Ebley Refuse Tip

This whole reach of the model is characterised by the generally small increases in water level in the river for both sensitivity tests. At the same time water levels on the floodplain increase indicating that the lack of water level increase in the channel is the result of more water entering storage. The area of greatest change in floodplain levels is around the A38 where water levels rise by up to 0.5m for the 20% test, but large increases in water level also occur upstream of Ryeford Road. Localised channel water level increases occur in the channels upstream of Meadow Bridge (0.13m for the 10% test, 0.19m for the 20% test) and upstream of Beards Mill Bridge (0.07m and 0.12m).

Ebley Refuse Tip to the Thames and Severn Canal Syphon

At the bifurcation weirs at Ebley Refuse Tip the two tests produce water level increases of 0.05m and 0.11m respectively, and there are similar increases upstream of Ebley Com Mill bridge (0.04m and 0.11m) and Ebley Mill weir (0.06m and 0.11m). However, for the reach of the river upstream of this point to Lodgemore Mills there are no water level increases exceeding 0.10m. The exception to this is the Dudbridge Relief Channel which is sensitive to increases in flow. Levels in the channel rise by around 0.10m for the 10% test and up to 0.20m for the 20% test. Water levels upstream of the exit from Lodgemore Mill pond rise by around 0.10m and 0.15m for the two tests until upstream of the Bath Road Bridge where the channel steepens considerably.

Thames and Severn Canal Syphon to Stafford Mills

The syphon carrying the river under the canal appears to be very sensitive to increases in discharge. The 10% increase in flow gives a 0.22m rise in water level, whilst a 20% increase results in a 0.43m rise in water levels. An effect of this is to cause a dramatic rise in levels within the disused canal due to flow passing over the river banks downstream of Butterow Bridge. Level increases upstream of this point as far as Thrupp Works are then of the order of 0.10m to 0.25m for the 10% test, and 0.16m to 0.45m for the 20% test.

Stafford Mills to Brimscombe Pond

Upstream of Stafford Mills water level increases are generally restricted to short reaches where the 0.10m increase is exceeded. Between Griffin's Mill Footbridge and Griffin's Mill bypass weir levels for the 20% test rise by 0.14m. Levels in the bypass channel around Phoenix Mill also rise significantly, the largest increases being 0.15m and 0.34m for the two tests upstream of the Swimming Pool bridge at section RFA_229. Levels upstream of the Thrupp caravan site bridge are also sensitive to discharge with the tests producing increases of 0.23m and 0.50m respectively. An increase of this magnitude would be sufficient to cause flooding of the caravan site on the left bank upstream of the bridge. The level increase at the bridge gradually reduces upstream until Brimscombe Pond is reached.

Brimscombe Pond to Belvedere Mill

The reach between Benson's culvert and Bourne Mill is relatively sensitive to increased discharge with a level increase of 0.18m throughout most of the reach for the 20% sensitivity test. However, this increase is still insufficient to cause flooding of Brimscombe Port. A second localised increase occurs around Wimberley Mills where levels between RFA_284 and RFA_288 rise by up to 0.18m for the 20% test. Water levels between St Marys Mill and St Iles Mill rise by up to 0.39m for the 20% test at section RFA_310.

Belvedere Mill to Whitehall Bridge

Water level increases throughout almost all of this reach exceed 0.10m for both the sensitivity tests. A particularly significant increase is at Chalford Industrial Estate sluices where water levels rise by 0.24m and 0.37m for the two events ensuring significantly more overtopping into the estate of the head wall for the sluices. Between Red Lion bridge and Ridley Mill water levels rise by 0.15m and 0.30m at almost every section. Upstream of Ridley Mill until Harley Lane is reached level increases are only over 0.10m (0.13m to 0.15m) for the 20% test. The reach between Harley Lane and Ashmead Sluices shows a dramatic rise in water level in both the channel and on the floodplain. For the 10% test levels increase by between 0.22m and 0.25m, whilst for the 20% test the increase is between 0.46m and 0.50m. Upstream of Ashmead sluices the increases only exceed 0.10m for the 20% test where the level rise immediately upstream of the structure is 0.31m. Bakers bridge is sensitive to discharge with upstream level increases of 0.17m and 0.47m for the two tests. Above Bakers Mill sluices the reservoir effectively limits level increases to below 0.10m until upstream of Puck Mill. Here level increases of 0.16m and 0.32 m for the tests occur throughout the reach. One effect of these increases is to cause more flow into the canal in its upper reaches.

The Nailsworth Stream

Due to the confined channel of the Nailsworth Stream, level increases occur almost everywhere for the two flow sensitivity tests. Between Selsley culvert and the downstream end of Erinoid culvert level increases are between 0.21m and 0.30m for the 10% test, and between 0.47m and 0.63m for the 20% test. Similar level increases are apparent upstream of the culvert, between Erinoid bridge and The Priory bridge. Above The priory increases do not exceed 0.10m for the 10% test, but are between 0.18m and 0.24m for the 20% test.

The most sensitive structures to increases in flow are the various culverts carrying the stream under Rooksmoor Mill. Immediately upstream of Rooksmoor Mill, levels increase by 0.50m for the 10% test, and 1.03m for the 20% test. A level increase of this magnitude would be likely to cause extensive flooding along the road down the Nailsworth valley though limitations on the available data mean that this is not fully represented in the Nailsworth Stream model. The backwater from Rooksmoor affects the reach upstream as far as Birds Crossing so it is not possible to determine the level increase in this reach due to the increase in discharge alone.

Once upstream of Birds Crossing there is then a long reach as far as Merretts Mills where water level increases are reasonably consistent, varying between 0.13m and 0.29m for the 10% test, and between 0.25m and 0.44m for the 20% test. There are then a series of localised increases in the area of Critchley's works where water level increases are around 0.40m for the 10% test and 0.80m for the 20% test.

From Dunkirk Mills up to the culvert downstream of Egypt Mill, water levels in the reach show a constant pattern of increase in both channels running beside the old mill ponds. Levels in the right hand channel rise by between 0.07m and 0.13m for the 10% test, and between 0.15m and 0.23m for the 20% test. In the left hand channel the increases are around 0.15m and 0.27m for the two tests throughout the reach.

For the remaining length of the model from the garage culvert to upstream of Egypt Mill larger level increases are again seen. These reach a peak of 0.27m and 0.67m in the short reach downstream of Egypt Mill before the culvert is reached.

6.3 Sensitivity to structure coefficients

Changes to the structure coefficients were made by reducing every coefficient in the model by either 10% or 20% as appropriate. The exception to this was at bridges where the bridge afflux coefficients were increased by the appropriate amount to achieve an increase in upstream head. No changes were made to coefficients relating to embankments or embankment structures.

From the results in Appendix 3 it is apparent that the effect of changing all the coefficients globally in the model produces a pattern of water level changes which is not straightforward to interpret. For example, levels upstream of some structures actually fall due to changes in the flow in the channel resulting from other structure coefficient changes. Structures where upstream water levels rise by more than 0.10m have been identified in Table 28. In the majority of these cases level rises are localised and restricted to immediately upstream of the structure. However, in some locations the level increases are sufficient to cause a significant increase in level throughout the reach upstream of the structure. These latter cases are discussed below.

Thames and Severn Canal Syphon

The previous set of sensitivity tests indicated that this syphon is very sensitive to increases in flow. However, the effect of a 20% reduction in coefficients is to produce an even larger increase in upstream water level of 0.53m. This increase appears to affect sections until upstream of Eagle Mill, though clearly there may be some additional local increase in water level at these sites which is masked by the level increase at the syphon. The increased water level downstream of

Butterow Hill bridge may be the cause of the 0.22m increase in level upstream which affects sections until upstream of the second Bowbridge estate bridge.

Thrupp Caravan Site Bridge

This bridge is not as sensitive to increases in the afflux coefficient as it is to increases in discharge. However, water levels throughout the reach upstream to the football ground at Brimscombe pond are raised as a result. This rise in level may be sufficient to cause flooding in the area of the caravan park.

Puck Mill Culvert

Upstream of Puck Mill culvert the river has a relatively shallow gradient until the upstream model boundary is reached. As a result, increases in water level upstream of the culvert affect both the river reach, right bank floodplain and flow into the canal upstream. A 20% reduction in structure coefficients at this structure results in an increase in water levels of 0.26m throughout this reach.

Rooksmoor Mill Culverts

The culverts under Rooksmoor Mill are as sensitive to decreases in structure coefficients as they are to increases in discharge. A 10% reduction in coefficients produces an upstream increase in water level of 0.39m, whilst a 20% reduction gives an increase of 0.84m. The effect of this then probably extends as far upstream as Station Road Works though the effect of other structures along the reach may also be significant.

South Woodchester Works Bridge

A 20% reduction in coefficients at this bridge produces a 0.30m increase in water level which then effects upstream levels as far as Frogmarsh Lane Bridge.

6.4 Discussion of results

The sensitivity tests carried out indicate that water levels in the model, particularly in the upstream reaches and in the Nailsworth Stream, are sensitive to the estimates made of the structure coefficients and the inflow hydrographs. As such, a small error in either of these could lead to a much larger error in the peak water level predicted. However, what the tests do tend to indicate is locations where blockage of structures or the channel may be critical. Of major interest is the finding that for the River Frome downstream of Dudbridge the model is relatively insensitive to errors in the peak flow and assumed structure coefficients. The main reason for this is that flow is able to find other routes around structure complexes by spilling onto the floodplain. Assuming that the coefficients used for embankments in the model are reasonable, and the coefficients used are borne out both by previous work on other modelling studies and by the close match between the physical model and SALMON-F models of Ebley gauging station, then the model results can be treated with a reasonable degree of confidence.

Of more concern is the general sensitivity in the upper reaches of the Frome from the Thames and Severn Canal syphon to Whitehall Bridge to increases in peak discharge. This suggests that minor discrepancies in flow pattern resulting for example from unmodelled links between the canal and the river may have a significant effect on the model predictions. Whilst efforts have been made to identify and include in the model all the links between the channels, undoubtedly

a number of links exist which have not been modelled as no information is available as to their whereabouts or dimensions.

A number of structures have been identified where structure blockage is a major concern and these can in general terms be taken as those structures listed in Table 28. Obviously of these structures some are more critical than others in terms of the effects of raised water levels resulting from structure blockage. In particular Fromehall Mill, Lodgemore Mill, the Thames and Severn Canal syphon, Thrupp caravan site bridge and Chalford Industrial Estate sluices are critical on the River Frome. On the Nailsworth Stream the Rooksmoor culverts, Station Road works structures at Critchleys are of concern.

7 Modelling of additional flows downstream of the Gloucester to Sharpness Canal and the effects of tide lock

7.1 Introduction

The drainage system of the River Frome downstream of Wheatenhurst Sluices is complicated by the presence of the following factors:

- the River Severn
- the Gloucester and Sharpness Canal
- the River Frome offtake into the Stroudwater Canal.

The River Severn is tidal in this reach and has periodically overtopped the Severn flood defences. In order to preserve the continuity of the defences, the River Frome discharges into the Severn at Framilode through a pair of flap gates. The Gloucester and Sharpness Canal (GSC) acts as a feeder channel for water to the Purton Treatment Works which supply water to Bristol. Water is collected by the canal from the River Cam, from the River Severn (during periods of low flow) and from the River Frome. In the case of the Frome, water is diverted from upstream of Wheatenhurst sluices into the old Stroudwater Canal and from there into the GSC. As a result of this function of the GSC, it incorporates an overspill structure adjacent to the siphons which carry the River Frome underneath it. The overspill structure is designed to discharge excess capacity in the GSC into the Frome and from there into the River Severn through the tide flaps.

As a result of these interactions, the River Frome requires a significant storage capacity downstream of Wheatenhurst Sluices. Water passing through the sluices under flood conditions, as well as overspill from the GSC, may be unable to exit through the tide flaps due to tide locking from the Severn. To accommodate this, the embankments between the Frome channels and the Severn floodplain are of the order of 9.5m to 10.0m in height, whilst those between the twin Frome channels are lower to allow for the storage of water under extreme flows. Additionally, the carrying the Walk Rhine under the track which branches to the north from Walk Bridge incorporates a wooden flap to exclude water.

As part of the River Frome Study, NRA-ST requested that the effects of tide-locking by the Severn, overspill from the GSC and flooding in the Frome be considered together for this reach of the model.

7.2 Modelling of flows and tides

The model used for this aspect of the study was the same as that used previously, though the upstream model boundary was provided by the flows taken from the main model upstream of Wheatenhurst Sluices. The model takes no account of flow over the main Frome embankments or over the Stroudwater Canal, though models fully interaction between the twin channels and the intermediate storage. This representation gives a limitation to the model which is discussed in more detail below.

The 5, 10, 25, 50 and 100 year fluvial floods in the River Frome were combined with standard repeating tides with a peak level of 4.88m, 6.00m, 8.00m, 10.00m and 10.50m. The low tide level for each of these lay between 4.00m and 4.50m. The peak of the fluvial flood was timed to coincide with a peak tide level in the River Severn, in order to give a "worst case" scenario. Flows from the GSC were represented in each test by a continuous inflow of 10m³/s into the left hand channel downstream of the siphon.

7.3 Results of additional modelling

The results of the modelling are presented in tabular form in Tables 23 to 27. These indicate that the primary control on water levels downstream of Wheatenhurst Sluices is the period of tide-locking due to levels in the River Severn. Levels upstream of the tide flaps are shown in Figure 30. The 4.88m tide peaks at the level of the invert of the tide flaps. As such, no period of tide-locking occurs and these can be considered as the water levels which would result from each return period flood combined with the GSC overflow if the Frome was freely discharging. For the 5 year event, only the central floodplain upstream of the GSC is flooded. However, for events of 10 year return period and over the downstream area of storage is also filled. The floodplain between the Stroudwater Canal and the left branch of the Frome upstream of the GSC, is flooded only by the 100 year event. Water remains excluded from the floodplain upstream of Walk Bridge by the flap on Walk Rhine upstream of its confluence with the Frome for all events. Water levels in the channels for all the events are well below the levels of the surrounding embankments, so flooding is constrained to within the Frome itself.

The 6.00m tide gives identical peak level results to those from the 4.88m tide. Water levels are consistently at least 1m higher upstream of the tide flaps than downstream and as such the discharge through the flaps is only marginally affected by the increased peak tide level. The upstream water levels are therefore unchanged throughout the river channels and floodplain downstream of Wheatenhurst Sluices.

The 8.00m tide produces a significant increase in water levels immediately upstream of the flapped outfall compared to the 6.00m tide. However, the effect of the weir downstream of Framilode Bridge causes water levels upstream of this point to increase only by a small amount for all of the events modelled. The majority of water level increase are of the region of 30mm or less upstream of Framilode weir. The effect of these small increases is however significant in relation to the 100 year flood event where water levels in cells 3 to 10 are all of the order of 9.00m OD. There is also an increase in water level over the smaller tide events of 90mm in cells 1 and 2.

The 10.00m tide results in peak water levels upstream of the tide flap which exceed 9m OD for all the events. This level is sufficient to cause a significant increase in water levels throughout the whole system downstream of

Wheatenhurst sluices. The effect of tide-locking is particularly apparent in that water levels downstream of Wheatenhurst sluices are no more than 210mm above those at the outfall for any of the events, and also there is virtually no headloss across any of the channel structures except for the canal syphons. The 10.50m tide produces only a slight further increase in peak level over the 10.00m tide and shows a very similar pattern of water levels and flooding. For both events, the height of the embankments along the Frome is sufficient to restrict flooding to within the Frome floodplain itself so that no flow occurs onto the Severn floodplain.

One main feature of the two larger tide events is the water level reached in cell 10. The model simplifies the area adjacent to Wheatenhurst Sluices by assuming that flow is not possible back under the Stroudwater Canal into Walk Rhine thereby causing flooding of the land to the south of the canal and river. However, water levels of the magnitude of those resulting from the 10.00 and 10.50m tides for all the events would be likely to flood this land from Walk Rhine itself. As a result, it might be expected that flooding of this land would produce slightly lower levels than those predicted by the model as constructed through filling of this storage via the culverts under the Stroudwater Canal.

8 Conclusions

- 8.1 A combined hydraulic and hydrological modelling study has been carried out of the River Frome and its catchment at Stroud in Gloucestershire.
- 8.2 A physical model of the Ebley Mill gauging station was constructed to assess the rating curve for the site. A new rating curve for flows greater than bankfull was developed.
- 8.3 Flood Studies Report rainfall-runoff procedures backed by available local data for the catchment were used to develop models of the River Frome subcatchments. These models were used to predict flows per observed flood events in 1994, 1979, and 1965. The 1994 and 1979 events were verified against actual data at the Ebley Mill gauging station through the use of a RIBAMAN routing model.
- 8.4 The verified FSR models were used to provide flow predictions for the 1965 flood event, and for the 5, 10, 25, 50, 100 and 150 year return period flood events.
- 8.5 Three SALMON-F computational hydraulic models of the catchment were constructed, including the whole of the Main River Frome, and the Nailsworth stream downstream of Egypt Mill. The models were based on data surveyed between 1984 and 1994.
- 8.6 The SALMON-F models were calibrated for observed flood events in 1994, 1979 and 1965, the inflow hydrographs which had been produced in the hydrological study. The calibration for the 1994 event was satisfactory at most locations. For the 1965 event the calibration was unsatisfactory at some locations, though this may be a function of changes in structure condition and operation since 1965.
- 8.7 The SALMON-F models were used to simulate the 5, 10, 25, 50, 100 and 150 year return period flood events.

- 8.8 Floodplain maps for the 100 year flood event and for the 5, 10, 25, 50 and 150 year flood events have been produced at 1:2500 scale from contoured plans of the river.
- 8.9 Sensitivity tests indicate that the model is relatively insensitive to peak flood flows and choice of structure coefficients in the lower reaches of the model. The tests also indicate that water levels in the upper reaches of the model are generally sensitive to increases in peak discharge.
- 8.10 Modelling of the interaction of the River Frome, the Gloucester and Sharpness canal and the River Severn has been carried out for a range of flows and tide levels. The results indicate that the Frome defences are adequate for the events modelled.

9 References

- (1) Bailey R P, 1991. An investigation into the water resources of the River Frome near Stroud. MSc dissertation.
- (2) USBPR 1978. Hydraulics of bridge waterways. Hydraulics Design Series (HDS) No 1.



Tables

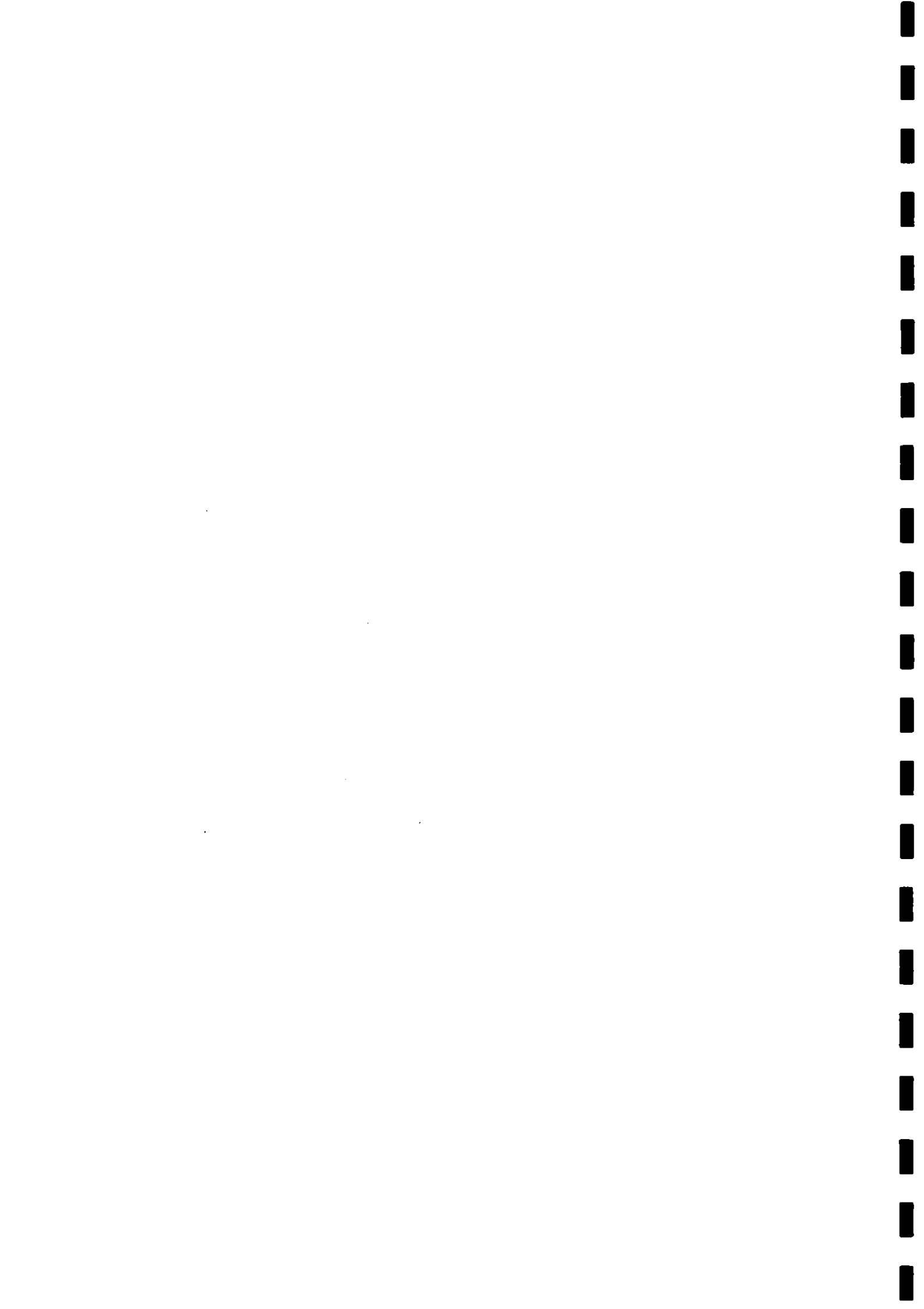


Table 1 Results of flood event analysis

Event date	Rainfall depth mm	Storm duration hr	Peak flow $m^3 s^{-1}$	LAG hr	ANSF $m^3 s^{-1}$	SMD mm	APIS mm	CWI mm	PR %	PR RURAL %	DPR RAIN %	DPR CWI %	SPR %	Tp (l) hr	Qp $m^3 s^{-1}$	Urban event
May 79	39.4	12	19.18	5.8	4.34	2.9	5.7	127.8	7.6	5.83	0.00	0.55	5.13	4.5	32	N
Dec 79	59.2	23	16.99	8.4	2.16	0.0	2.2	127.2	6.3	4.49	3.56	0.28	0.36	3.5	29	N
Mar 86	15.3	8	4.52	4.0	3.02	6.0	2.5	121.5	2.3	0.38	0.00	-0.88	1.25	3.5	28	N
Jul 86	15.5	13	3.56	-	2.17	91.8	4.3	35.4	1.8	-0.14	0.00	-22.40	22.26	-	-	Y
Aug 86	42.5	12	7.25	-	1.50	73.2	2.9	54.7	2.4	0.48	0.86	-17.58	17.20	-	-	Y
Sep 86	17.9	11	2.35	1.3	1.40	59.2	0.3	66.1	0.7	-1.27	0.00	-14.73	13.46	2.0	68	Y
Oct 86	22.8	8	3.51	1.8	1.25	78.4	2.9	51.5	0.9	-1.06	0.00	-18.38	17.31	2.0	66	Y
Apr 87	26.0	15	9.31	6.5	4.49	0.0	3.1	128.1	4.7	2.85	0.00	0.78	2.07	5.5	27	N
Jun 87	23.9	8	4.82	-	2.29	60.7	6.9	71.2	1.7	-0.24	0.00	-13.45	13.21	-	-	Y
Jun 87	12.9	11	3.23	5.3	2.19	46.6	7.7	86.1	1.8	-0.14	0.00	-9.73	9.59	5.0	25	N
Nov 87	29.0	11	10.75	5.7	3.78	0.2	1.3	128.1	5.4	3.57	0.00	0.70	3.29	8.0	33	N
Dec 87	8.3	3	4.06	2.4	3.00	0.0	6.2	131.2	2.2	0.28	0.00	1.55	-1.27	3.0	42	Y
Aug 88	21.1	9	3.10	2.8	1.29	66.5	7.6	66.1	1.2	-0.75	0.00	-14.73	13.97	2.0	46	Y
Oct 88	21.3	7	5.04	-	1.83	35.7	2.7	92.0	1.8	-0.14	0.00	-8.25	8.11	-	-	Y
Nov 89	28.0	17	4.75	3.0	1.54	57.7	1.2	68.5	2.4	0.48	0.00	-14.13	14.81	3.0	30	Y
Jun 90	14.2	9	2.51	3.1	1.14	96.8	5.4	34.6	1.3	-0.65	0.00	-22.60	21.95	2.0	40	Y
Apr 91	30.4	26	3.52	6.8	2.10	19.0	0.9	106.9	1.4	-0.55	0.00	4.53	3.98	2.5	27	N
Jul 91	24.5	9	3.44	2.6	1.32	46.3	0.8	79.5	1.1	-0.86	0.00	-11.38	10.52	3.0	54	Y
Apr 93	12.6	8	2.76	2.9	1.95	13.9	3.8	114.9	0.9	-1.06	0.00	-2.53	1.46	3.0	40	Y
Apr 93	15.0	7	3.95	2.3	2.07	5.8	6.7	125.9	1.5	-0.44	0.00	0.23	-0.67	3.0	40	Y
May 93	10.7	5	3.33	1.7	2.01	27.0	2.8	100.8	1.0	-0.96	0.00	-6.05	5.09	2.5	60	Y
May 93	17.2	5	4.20	2.8	1.90	22.2	2.2	105.0	1.5	-0.44	0.00	-5.00	4.58	3.5	50	Y
Average values																
Averages from urban events only																
Averages from events only rural/urban																

Table 2 *Estimation of unit hydrograph and losses model parameters by different methods*

Method	Time-to-peak Tp(0) (hr)	Standard percentage runoff SPR (%)	Baseflow ANSF (m ³ s ⁻¹)
Catchment characteristics	7.3	14.3	4.80
Flood event analysis	3.0 4.1 rural/urban 1.1 urban	8.5 3.7 rural/urban 9.5 urban	2.22 3.15 rural/urban 1.57 urban
LAG from flood event analysis	2.8 4.7 rural/urban 1.0 urban	-	-
BFI from flow	-	14.8	-
BFI from HOST	-	23.4	-

Table 3 Refinement of unit hydrograph and losses model parameters for subcatchments

Catchment	Tp(0)ccs (hr)	Tp(0)obs (hr)	SPRccs (%)	SPRobs (%)	ANSF ccs (m ³ s ⁻¹)	ANSFobs (m ³ s ⁻¹)
Ebley Mill	7.30	4.10 rural/urban 1.10 urban	14.3	3.7 rural/urban 9.5 urban	4.80	3.15 rural urban 1.57 urban
Upper Frome	6.62	3.72	12.7	3.3	1.25	0.82
Toadsmoor Valley	4.75	2.67	19.5	5.1	0.22	0.14
Painswick Stream	4.99	2.80	10.0	2.6	0.82	0.54
Randwick Stream	1.48	0.83	10.0	2.6	0.10	0.07
Slad Brook	4.81	2.70 rural/urban 1.00 urban	10.0	2.6 rural/urban 6.6 urban	0.30	0.20 rural/urban 0.03 urban
Nailsworth Stream	5.06	2.84 rural/urban 1.00 urban	19.5	5.1 rural/urban 13.0 urban	1.07	0.70 rural/urban 0.02 urban
Frome to Severn	7.84	4.40	14.1	3.6	5.47	3.60

Table 4 Breakdown of features of the River Frome models

Feature	Number of occurrences			
	Upper Frome	Lower Frome	Nailsworth Stream	Total
Total sections	482	765	200	1447
Total cells	376	531	173	1080
River sections	343	354	165	862
Floodplain sections	27	82	0	109
Embankment sections	110	267	30	407
Causeway sections	0	19	3	22
River cells	239	243	108	590
Structure cells	83	69	45	197
Floodplain cells	40	112	5	157
Junction cells	12	26	7	45
Bridges	28	23	22	73
Headlosses	9	4	7	20
Sluice elements	35	47	15	97
Weir elements	65	47	15	127
Siphon elements	2	1	0	3
Tide flaps	0	1	0	1
Permanent breaches	10	1	0	11
Culverts	1	12	0	13

Table 5 Upper Frome sub-model structure elements

Structure name	Structure cell	Element type	Element label
Railway Mill Weir	RFA_180 RFA_181	WR WR WR WR WR	GWRMLWR1 GWRMLWR2 GWRMLWR3 GWRMLWR4 GWRMLWR5
Canal Syphon	RFA_183 RFA_184	SY	THSEVSYP
Arundell Mill Sluices	RFA_186 RFA_187	WR WR SL SL	ARUMLWR1 ARUMLWR2 ARUMLSL1 ARUMLSL2
Eagle Mills	RFA_189 RFA_190	BR	CVNWKUL
Butterow Hill Bridge	RFA_192 RFA_193	BR	BUTHILBR
Bowbridge Estate Bridge	RFA_194 RFA_195	BR	BOWESBR1
Housing Estate Link Bridge	RFA_198 RFA_199	BR	BOWESBR2
Stanton's Bridge	RFA_203 RFA_204	BR	BUTFTPBR
Stafford Mills	RFA_207 RFA_208	SL SL WR WR	THRUPSL1 THRUPSL2 THRUPWR1 THRUPWR2
Griffin's Mill Footbridge	RFA_214 RFA_215	HL	GRFMLBR1
Griffin's Mill Bypass Weir	RFA_217 RFA_218	SL WR WR WR	GRFBYSL1 GRFBYWR1 GRFBYWR2 GRFBYWR3
Griffin Mill Estate Bridge	RFA_219 RFA_220	BR	GRFACBR
Griffin Mill Estate Bridge 2	RFA_221 RFA_222	BR	GRFMLBR2
Phoenix Mill Bypass Channel Bridge	RFA_224 RFA_225	BR	BROOKBR1

Table 5 Continued

Structure name	Structure cell	Element type	Element label
Phoenix Mill Lock Footbridge	RFA_226 RFA_227	BR	HAMLCKBR
Swimming Pool Footbridge	RFA_228 RFA_229	BR	SWMPOLBR
Phoenix Mill Bypass Weir	RFA_230 RFA_231	WR WR WR SL	PHXBYWR1 PHXBYWR2 PHXBYWR3 PHXBYSL1
Thrupp Works Bridge 1	RFA_233 RFA_234	BR	PHXACSB
Thrupp Works Bridge 2	RFA_235 RFA_236	BR	PHXFTPBR
Thrupp Works Sluices	RFA_237 RFA_238	SL WR WR WR	PHXESSL1 PHXESWR1 PHXESWR2 PHXESWR3
Thrupp Works Bridge 3	RFA_239 RFA_240	BR	HAKSIDBR
Caravan Park Bridge	RFA_241 RFA_242	BR	THPCVNBR
Brimscombe Mill Pond Sluices	RFA_249 RFA_250	SL SL WR	BRIPOSL1 BRIPOSL2 BRIPOWR1
Brimscombe Mill Pond Culvert	RFA_252 RFA_253	HL	BRIPOCUL
Brimscombe Hill Bridge	RFA_254 RFA_255	BR	BRIMSCBR
Brimscombe Port Exit Bridge	RFA_256 RFA_257	BR	BURKETBR
Brimscombe Mill Culvert	RFA_258 RFA_259	HL	BENSNBR1
Brimscombe Mill Access Bridge	RFA_260	BR	BENSNBR2
Brimscombe Mill Sluices	RFA_262 RFA_263	SL WR WR	PTINDSL1 PTINDWR1 PTINDWR2

Table 5 Continued

Structure name	Structure cell	Element type	Element label
Iles Mill Culvert	RFS_002 RFS_003	SL SL WR	ILEMLSL1 ILEMLSL2 ILEMLWR1
Iles Mill Bypass Sluices	RFT_002 RFT_003	SL	ILEBYSL1
Butterow Hill Canal Bridge	SCB_006 SCB_007	HL	BUTCANBR
Bowbridge Lock Weir	SCB_008 SCB_009	WR	BOWLCKWR
Griffin's Mill Lock Weir	SCB_015 SCB_016	WR	GRIFMLWR
Phoenix Mill Lock Weir	SCB_019 SCB_020	WR	HAMLCKWR
Wimberley lock Weir	SCC_005 SCC_006	SL WR WR	WIMCNSL1 WIMCNWR1 WIMCNWR2
St Marys Mill Canal Culvert	SCC_013 SCC_014	WR	ILECNCUL
Iles Mill Lock Weir	SCC_015 SCC_016	WR	ILELCKWR
Springside Canal Culvert	SCC_017 SCC_018	WR	BELMLCUL
Greystones Canal Culvert	SCC_019 SCC_020	SL	CHCANCV1
Chalford Canal Culvert	SCC_021 SCC_022	SL	CHCANCV2
Cowcombe Hill Culvert	SCC_023 SCC_024	SL	CHCHCNCV
Clowes Lock Weir	SCC_026 SCC_027	WR	CLOWESWR
Golden Valley lock Weir	SCC_030 SCC_032	WR WR	GOLDVWR1 GOLDVWR2
Bakers Mill Lower Lock	SCC_046 SCC_047	WR WR SL	BAKCNWR1 BAKCNWR2 BAKCNSL1

Table 5 Continued

Structure name	Structure cell	Element type	Element label
Bakers Mill Upper Lock	SCC_050 SCC_051	WR WR WR	BAKCNWR3 BAKCNWR4 BAKCNWR5
Puck Mill Lower Lock	SCC_057 SCC_058	SL WR	PUCKMSL1 PUCKMWR1
Puck Mill Upper Lock	SCC_059 SCC_060	WR	PUCKMWR2
Whitehall Lower Lock	SCC_061 SCC_062	WR SL	WHITEHWR WHITESL1

Table 6 Lower Frome sub-model structure elements

Structure name	Structure cell	Element type	Element label
Dudbridge Weir	NSA_001 NSA_002	WR SL	NLSOUTWR NLSOUTSL
River Severn Outfall	RFA_001 RFA_001A	FL	RIVSEVFL
Upper Framilode Weir	RFA_002 RFA_003	SL SL SL SL	UFRAMSL1 UFRAMSL2 UFRAMSL3 UFRAMSL4
Gloucester & Sharpness Canal West Channel Siphon	RFA_008A RFA_009	SY	GSCLHCSY
Whitminster West Channel Weir	RFA_012 RFA_013	WR WR WR WR	WHILHWR1 WHILHWR2 WHILHWR3 WHILHWR4
Whitminster Bridge	RFA_015 RFA_016	BR	WHITMIBR
Wheatenhurst Sluices	RFA_018 RFA_019	SL WR WR	WHEATESL WHEATWR1 WHEATWR2
Walk Rhine Bridge	RFA_023 RFA_024	BR	WALKRHBR
Fromebridge Mill	RFA_032 RFA_033	WR WR WR SL	FROMEWR1 FROMEWR2 FROMEWR3 FROMESLS
A38 Road Bridge	RFA_034 RFA_035	BR	A38RODBR
M5 Road Bridge	RFA_039 RFA_040	BR	M5ROADBR
Meadow Mill	RFA_043 RFA_044	HL	MEADOWHL
Meadow Bridge	RFA_048 RFA_049	BR	MEADOWBR

Table 6 Continued

Structure name	Structure cell	Element type	Element label
Millend Mills	RFA_053 RFA_054	SL	MILLES1
		SL	MILLES2
		SL	MILLES3
		SL	MILLES4
		SL	MILLES5
Beards Mill Bridge	RFA_074 RFA_075	BR	BEARMIBR
Beards Mill Side Weir	RFA_076 RFA_077	WR	BEARDWR1
		WR	BEARDWR2
Stanley Downton Bridge	RFA_087 RFA_088	BR	STDOWNBR
Stanley Mills Weir	RFA_103 RFA_104	SL	STANMSL1
		SL	STANMSL2
		SL	STANMSL3
		SL	STANMSL4
		SL	STANMSL5
Stanley Mills Bridge	RFA_105 RFA_106	BR	STANMIBR
Redhill Culvert	RFA_114 RFA_115	BR	REDHILBR
Refuse Tip Weir 1	RFA_118 RFA_119	WR	REFWR3-1
		WR	REFWR3-2
Ebley Corn Mill Sluices	RFA_125 RFA_126	SL	EBCORNSL
Ebley Corn Mill Bridge	RFA_128 RFA_129	BR	EBCORNBR
Ebley Mill Bridge	RFA_135 RFA_136	BR	EBMILLBR
Ebley Mill Weir	RFA_137 RFA_138	WR	EBLMLWR1
		WR	EBLMLWR2
		WR	EBLMLWR3
Dudbridge Road Culvert	RFA_145 RFA_146	SL	DUDBRICUL
Redlers Mill Sluices	RFA_147 RFA_148	SL	REDLRS1
		WR	REDLRWR1
		WR	REDLRWR2
		WR	REDLRWR3

Table 6 Continued

Structure name	Structure cell	Element type	Element label
Fromehall Mill Bypass Sluices	RFA_156 RFA_157	WR WR SL SL WR	FROMLWR1 FROMLWR2 FROMLSL1 FROMLSL2 FROMLWR3
Fromehall Mill Bridge	RFA_159 RFA_160	BR	FRMILLBR
Lodgemore Bridge	RFA_163A RFA_164	BR	LOMILLBR
Lodgemore Mills Sluices	RFA_165 RFA_166	SL WR WR	LODMLSL1 LODMLWR1 LODMLWR2
Lodgemore Mill Culvert	RFA_167 RFA_168	HL	LOMILLCU
Bath Road Bridge	RFA_170 RFA_171	BR	A46BRDBR
Spring Hill Bridge	RFA_002 RFC_003	BR	SPRINGBR
Gloucester & Sharpness Canal East channel Siphon	RFB_003 RFB_004	SY	GSCRHCSY
Whitminster East Channel Weir	RFB_007 RFB_008	SL SL SL SL SL WR	WHIRHSL1 WHIRHSL2 WHIRHSL3 WHIRHSL4 WHIRHSL5 WHIRHWR1
Spring Hill Weir	RFC_001 RFC_001A	WR WR	CARVPWR1 CARVPWR2
Churchend Bridge	RFC_005 RFC_006	BR	CHESCHBR
Churchend Weir	RFC_007 RFC_008	WR WR	CHESCWR1 CHESCWR2
Millend Lane Bridge	RFD_003 RFD_004	BR	MILENDBR
Churchend Sluices	RFD_007 RFD_008	SL SL SL	CHESLSL1 CHESLSL2 CHESLSL3

Table 6 Continued

Structure name	Structure cell	Element type	Element label
Bonds Mill	RFD_019	SL	BONCUSL1
	RFD_020	SL	BONCUSL2
GWR Embankment Bridge	RFD_025 RFD_026	HL	GWREMBBR
Ocean Pool Bridge	RFD_026 RFD_027	BR	OCPOOLBR
Bridgend Mill Side Weir	RFD_034	SL	BRIDGSL1
	RFD_035	SL	BRIDGSL2
Bridgend Mill Bridge	RFD_037 RFD_038	BR	BRIDMIBR
Bridgend Kennels Bridge	RFD_043 RFD_044	BR	BRKENNBR
Bridgend Kennels Sluices	RFD_047 RFD_048	SL	BRIKENSL
Downton road Footbridge	RFD_050 RFD_051	BR	DOWNFTBR
Upper Mills Footbridge	RFD_052 RFD_053	BR	UPMIFTBR
Upper Mills Sluices	RFD_054 RFD_055	SL	UPMILLSL
Upper Mills Bridge	RFD_060 RFD_061	BR	UPMILLBR
Ryeford Saw Mills Culvert	RFD_067	SL	RYEFDSL1
	RFD_068	SL	RYEFDSL2
		WR	RYEFDWR1
Refuse Tip Weir 3	RFD_078 RFD_079	WR	REFWR1-1
Refuse Tip Weir 2	RFD_080	WR	REFWR2-1
	RFD_081	WR	REFWR2-2
Market Garden Weir	RFE_004	WR	MARGDWR1
	RFE_005	WR	MARGDWR2
Beards Mill	RFF_002	WR	BEARDWR3
	RFF_003	WR	BEARDWR4

Table 6 Continued

Structure name	Structure cell	Element type	Element label
Bonds Mill Side Sluices	RFG_005 RFG_006	SL SL SL SL	BONSLSL1 BONSLSL2 BONSLSL3 BONSLSL4
Ebley Corn Mill Culverts	RFH_003 RFH_004	SL SL	EBCNCUL1 EBCNCUL2
Bridgend Mill Culvert	RFJ_002 RFJ_003	WR	BRIDGCUL
Bridgend Mill Bypass	RFK_003 RFK_004	WR	BRIDGBYP
Banty Ditch Culvert	RFL_010 RFL_011	HL	BANTYCUL
Banty Ditch Weir	RFL_014 RFL_015	WR	BANTYDWR
Fromehall Mill Sluice	RFN_004 RFN_005	SL SL	FRMHLCL1 - FRMHLCL2
Dudbridge Lock Weir	SCA_004 SCA_005	WR	DUDLCKWR
Printing Works Lock Weir	SCA_006 SCA_007	WR	RUSBRKWR
Lodgemore Canal Weir	SCA_012 SCA_013	WR	PSWCKSWR
Cainscross Road Lock Weir	SCA_014 SCA_015	WR WR	CAINSWR1 CAINSWR2

Table 7 Nailsworth Stream sub-model structure elements

Structure name	Structure cell	Element type	Element label
Dudbridge Weir	NSA_001 NSA_002	WR SL	NSOUTFWR NSOUTFSL
Selsley Hill Culvert	NSA_004 NSA_005	BR	SELSLYCV
Erinoid Downstream Control Weir	NSA_012 NSA_013	WR	GANTRYWR
Erinoid Culvert	NSA_013 NSA_014	HL	ERINODCV
Erinoid Bridge	NSA_015 NSA_016	SL	ERINODBR
Car Park Bridge	NSA_018 NSA_019	BR	CARPRKBR
Cotswold House Bridge	NSA_022 NSA_023	HL	COTSHOBR
New Tynings Footbridge	NSA_024 NSA_025	BR	NEWTYNBR
Priory Bridge	NSA_027 NSA_028	HL	PRIORYBR
Rooksmoor Mill Right Channel Culvert	NSA_037 NSA_038	SL	RKSMRCVR
Rooksmoor Mill Weir	NSA_038 NSA_039	WR SL	RKSMRWR1 RKSMRWR2
Selsley road Bridge	NSA_044 NSA_045	BR	SELSLYBR
Selsley Road Weir	NSA_045 NSA_046	WR	SELSLYWR
Paul's Rise Bridge	NSA_047 NSA_048	BR	PAULSRBR
Railway Bridge	NSA_051 NSA_052	BR	NSRAILBR
Forge Weir	NSA_053 NSA_054	WR	FORGEWR
Birds Crossing Bridge	NSA_055 NSA_056	BR	BIRDSXBR

Table 7 Continued

Structure name	Structure cell	Element type	Element label
Station Road Works	NSA_061 NSA_062	SL WR WR SL SL	STRODSL1 STRODWR1 STRODWR2 STRODSL2 STRODSL3
Station Road Bridge	NSA_062 NSA_063	SL WR	STRODSL4 STRODWR3
South Woodchester Works Bridge	NSA_064 NSA_065	BR	STHWODBR
Frogmarsh Lane Bridge	NSA_075 NSA_076	HL	FROGMSBR
Bath Road Bridge	NSA_077 NSA_078	BR	BATHRDBR
Merrett's Mills Bridge	NSA_082 NSA_083	BR	MERRMIBR
Merrett's Mills Culvert	NSA_085 NSA_086	HL	MERRETSL
Inchbrook Bridge	NSA_088 NSA_089	BR	INCHBKBR
Inchbrook Culvert	NSA_090 NSA_092	HL	INCHBKSL
Critchley's Bridge 1	NSA_092 NSA_093	BR	CRITHBR1
Critchley's New Culvert	NSA_095 NSA_096	BR	CRITHNCV
Critchley's Bridge 2	NSA_097 NSA_098	BR	CRITHBR2
Dunkirk Mills Culvert	NSA_100 NSA_101	SL	DUNKRSL1
Garage Culvert	NSA_118 NSA_119	BR	GARAGECV
Egypt Mill Weir	NSA_121 NSA_122	WR WR WR	EGYPTWR1 EGYPTWR2 EGYPTWR3
Rooksmoor Mill Left Channel Culvert	NSB_001 NSB_002	SL SL	RKSMRSL1 RKSMRSL2

Table 7 Continued

Structure name	Structure cell	Element type	Element label
Critchley's Left Channel Culvert	NSC_001 NSC_002	WR SL	CRITRDWR CRITHSL2
Critchley's Bridge 3	NSC_007 NSC_008	BR	CRITHBR3
Critchley's Bridge 4	NSC_008 NSC_009	BR	CRITHBR4
Tennis Court Bridge 2	NSC_011 NSC_012	HL	TENISBR2
Dunkirk Mills Bridge 1	NSC_014 NSC_015	BR	DUNKRBR1
Dunkirk Mills Side Spills	NSC_015 NSC_016	WR WR SL	DUNKRWR1 DUNKRWR2 DUNKRSL2
Critchley's Bridge 5	NSD_001 NSD_002	SL	CRITHSL1
Tennis Court Bridge 1	NSD_005 NSD_006	BR	TENNISBR
Elm Brook Bridge	NSD_007 NSD_008	BR	ELMBRKBR
Gables Bridge	NSD_009 NSD_010	BR	GABLESBR
Dunkirk Mills Entrance Bridge	NSD_011 NSD_012	BR	DUNKRBR2
Filling Station Culvert	NSD_018 NSD_019	SL WR	FILSTCV1 FILSTCV2

Table 8 Upper Frome Sub-model sluice gate openings

Element Label		Fixed Opening	Minimum Opening	Maximum Opening
ARUMSL1		-	0.00	1.30
ARUMSL2		-	0.00	1.30
THRUPSL1		1.23	-	-
THRUPSL2		1.19	-	-
GRFBYSL1		0.35	-	-
PHXBYSL1		0.50	-	-
PHXESSL1		0.30	-	-
BRIPOSL1		0.25	-	-
BRIPOSL2		-	0.00	1.00
PTINDSL1		-	0.00	0.80
PHXMLSL1		-	0.00	1.80
BORMSL1		0.80	-	-
BORMSL2		1.15	-	-
MARBYSL1		0.72	-	-
MARBYSL2		0.57	-	-
ILEUPSL1		0.80	-	-
CHINDSL1		0.45	-	-
CHINDSL2		-	0.00	1.20
CHINDSL3		0.10	-	-
RIDLYSL1		0.62	-	-
BAKERSBR	1	1.80	-	-
BAKERSL1		-	0.00	0.60
MARMLSL1		1.34	-	-
ILEMLSL1		0.20	-	-
ILEMLSL2		-	0.00	0.70
ILEBYSL1		-	0.00	0.80
WIMCNSL1		0.10	-	-
CHCANCV1	1	1.20	-	-
CHCANCV2	1	0.55	-	-

Table 8 Continued

Element Label	Fixed Opening		Minimum Opening	Maximum Opening
BAKCNSL1	0.10		-	-
PUCKMSL1	0.10		-	-
WHITESL1	0.10		-	-
CHCHCNCV	1	1.16	-	-
THANHOBR	1	2.35	-	-
PUCKCULV	1	1.31	-	-

Notes:

- 1 These structures are culverts represented using the orifice type flow equation of a sluice gate.

Table 9 Lower Frome Sub-model sluice gate openings

Element Label		Fixed Opening	Minimum Opening	Maximum Opening
NLSOUTSL		1.00	-	-
RIVSEVFL	2	2.75	-	-
UFRAMSL1		2.93	-	-
UFRAMSL2		1.82	-	-
UFRAMSL3		1.24	-	-
UFRAMSL4		0.61	-	-
WHEATESL		-	0.0	1.80
FROMESLS		-	0.0	1.7
MILLES1		0.50	-	-
MILLES2		0.50	-	-
MILLES3		0.90	-	-
MILLES4		1.10	-	-
MILLES5		0.90	-	-
STANMSL1		0.69	-	-
STANMSL2		0.66	-	-
STANMSL3		0.74	-	-
STANMSL4		-	0.00	1.30
STANMSL5		-	0.00	1.30
EBCORNSL		1.35	-	-
DUDBRCUL	1	1.55	-	-
REDLRSL1		-	0.00	1.30
FROMLSL1		0.40	-	-
FROMLSL2		0.30	-	-
LODMSL1		-	0.00	1.30
WHIRHSL1		1.83	-	-
WHIRHSL2		1.51	-	-
WHIRHSL3		1.19	-	-
WHIRHSL4		0.87	-	-
WHIRHSL5		0.55	-	-

Table 9 Continued

Element Label		Fixed Opening	Minimum Opening	Maximum Opening
CHESSL1		1.14	-	-
CHESSL2		1.55	-	-
CHESSL3		1.58	-	-
BRIDGSL1		0.05	-	-
BRIDGSL2		0.00	-	-
BRIKENSL		1.42	-	-
UPMILLSL		1.30	-	-
RYEFDSL1		-	0.00	1.60
RYEFDSL2		-	0.00	1.85
BONSLSL1		0.00	-	-
BONSLSL2		1.10	-	-
BONSLSL3		1.30	-	-
BONSLSL4		1.30	-	-
EBCNCUL1	1	1.36	-	-
EBCNCUL2	1	1.61	-	-
FRMHLCL1		0.68	-	-
FRMHLCL2		0.45	-	-
BONCUSL1	1	1.91	-	-
BONCUSL2	1	1.94	-	-

Notes:

- 1 These structures are culverts represented using the orifice type flow equation of a sluice gate.
- 2 This is a flapped outfall.

Table 10 *Nailsworth Stream Sub-model sluice gate openings*

Element Label		Fixed Opening	Minimum Opening	Maximum Opening
NSOUTFSL		1.00	-	-
RKSMRCVR	1	1.59	-	-
RKSMRWR2		0.326	-	-
STRODSL1		0.90	-	-
STRODSL2		0.40	-	-
STRODSL3		0.00	-	-
STRODSL4		1.72	-	-
DUNKRSL1		0.60	-	-
RKSMRSL1		0.30	-	-
RKSMRSL2		0.39	-	-
CRITHSL1		1.49	-	-
DUNKRSL2		0.70	-	-
CRITHSL2		0.69	-	-
FILSTACV	1	1.06	-	-
ERINODBR	2	1.62	-	-

Notes:

- 1 These structures are culverts represented using the orifice type flow equation of a sluice gate.
- 2 This structure is a bridge represented using the orifice type flow equation of a sluice gate.

Table 11 Embankment and causeway structures included in the River Frome Sub-models

Structure location	Model section	Structure type	Label
Upper Frome sub-model			
Canal link to river upstream of canal syphon	ELA_185	PB PB	CAN2RFA1 CAN2RFA2
Canal link to river upstream of Bourn Mills	ERQ_004	PB	CAN2RFQ1
Link between River Frome and canal d/s of St Marys House	ERA_301A	CV	MARYLINK
Link between Ashmead Mill channel and River Frome	ERA_358	PB	ASHMDPB
Bakers Mill reservoir spills	ERA_369	PB PB	BARESPB1 BARESPB2
Links between the River Frome and Bakers Mill reservoir	ERA_371	PB	BARESPB3
	ERA_372	PB	BARESPB4
	ERA_373	PB	BARESPB5
	ERA_374	PB	BARESPB6
Lower Frome sub-model			
Culverts adjacent to Walk Bridge	CLA_015	CV	WALKCV
	CLA_017	CV	WALKCV2
A38 road bridge left hand culvert	CLA_035	CV	A38CV1
A38 road bridge right hand culverts	CRA_035B	CV CV	A38CV2 A38CV3
M5 road bridge left hand culvert	CLA_039	CV	M5CV1

Table 11 Continued

Structure location	Model section	Structure type	Label
M5 road bridge right hand culverts and foot tunnel	CRA_039	CV CV	M5CV2 M5CV3
Millend Lane culvert	CRA_053	CV	MILLEND CV
Railway embankment central culvert	CLD_026	CV	RAIL CV1
Ryeford underpass	CRL_011	CV	RYEFDUP
Ryeford Road railway bridge	CLA_067	CV	RYEFDRY
Link between River Frome and Fromehall Mill pond	ERA_161	PB	FRMHLPND
Nailsworth Stream sub-model			
Left channel feed into Dunkirk Mills ponds	ERD_021	PB	PB1
	ERD_018	PB	PB2
Link between Dunkirk Mills ponds	CLA_111	CV	CV1
	CLA_110	CV	CV2
Right channel feed into Dunkirk Mills ponds	ELA_108	CV	CV3

Table 12 Locations of model inflows for the River Frome Sub-models

Inflow name	Type	Location	Scaling factor
Upper Frome sub-model			
Upper Frome	Upstream boundary	RFA_389	-
Upper Middle Frome	Lateral inflow	RFA_279 - RFA_298 RFA_299 - RFA_302 RFA_303 - RFA_307 RFA_308 - RFA_311 RFA_312 - RFA_316 RFA_317 - RFA_389	0.1922 0.0210 0.0275 0.0194 0.0275 0.7124
Toadsmoor Stream	Tributary inflow	RFA_278 - RFA_279	-
Lower Middle Frome	Lateral inflow	RFA_175 - RFA_209 RFA_210 - RFA_218 RFA_219 - RFA_222 RFA_223 - RFA_231 RFA_232 - RFA_271 RFA_272 - RFA_276 RFA_277 - RFA_278	0.2790 0.0734 0.0147 0.0457 0.2741 0.0326 0.0098
Downstream Boundary	Rating section	RFA_175	-
Thames & Severn Canal - Upper reach	Upstream boundary	SCC_070	-
Thames & Severn Canal - Upper reach	Rating section	SCC_001	-
Thames & Severn Canal - Lower reach	Upstream boundary	SCB_024	-

Table 12 Continued

Inflow name	Type	Location	Scaling factor
Thames & Severn Canal - Lower reach	Rating section	SCB_001	-
Lower Frome sub-model			
Lower Frome	Upstream boundary	RFA_175	-
Nailsworth Stream	Upstream boundary	NSA_002	-
Slad Brook	Upstream boundary	SCA_016	-
Painswick Stream	Tributary inflow	SCA_011 - SCA_012	-
Randwick Stream	Tributary inflow	SCC_005 - SCC_006	-
Lower Middle Frome	Lateral inflow	RFA_145 - RFA_153 RFA_154 - RFA_161 RFA_162 - RFA_175	0.0935 0.0581 0.1191

Table 12 Continued

Inflow name	Type	Location	Scaling factor
Lower Frome	Lateral inflow	RFA_001 -	0.0482
		RFA_005	0.0487
		RFA_006 -	0.0605
		RFA_013	0.2381
		RFB_001 -	0.0230
		RFB_008	0.1120
		RFA_015 -	0.0174
		RFA_046	0.0263
		RFC_001 -	0.0459
		RFC_009	0.1059
		RFA_050 -	0.0835
		RFA_071	0.0190
		RFD_008A -	0.0571
		RFD_011	0.0599
		RFD_012 -	0.0410
		RFD_017	0.0135
		RFD_021 -	
		RFD_031	
		RFA_078 -	
		RFA_099	
		RFA_100 -	
		RFA_119	
		RFD_040 -	
		RFD_046	
		RFD_047 -	
		RFD_066	
		RFD_067 -	
		RFD_081	
		RFA_128 -	
		RFA_140	
		RFA_141 -	
		RFA_144	
Downstream Boundary	Stage boundary	RFA_001	-
Stanley Mills - mill stream	Upstream boundary	RFM_003	-
Dudbridge - relict Frome	Upstream boundary	RFX_007	-
Nailsworth Stream sub-model			
Nailsworth Stream	Upstream boundary	NSA_124	-

Table 12 Continued

Inflow name	Type	Location	Scaling factor
Lower Nailsworth	Lateral inflow	NSD_002 -	0.03773
		NSD_021	0.01802
		NSD_022 -	0.01104
		NSD_031	0.02760
		NSA_096 -	0.01711
		NSA_101	0.35760
		NSA_102 -	0.22503
		NSA_113	0.30587
		NSA_114 -	
		NSA_122	
		NSC_003 -	
		NSC_004	
		NSA_001 -	
		NSA_036	
		NSA_040 -	
		NSA_094	
Egypt Mill - wheel channel	Upstream boundary	NSD_024	-
Downstream boundary	Stage boundary	NSA_001	-

Table 13 Availability of calibration data for the River Frome models

Calibration event	Location	Record type	Equivalent model section
5 January 1994	Ebley Mill gauging station	Continuous level recorder & flows	RFA_139
	C1 - Persimon Homes Nailsworth Stream	Continuous level recorder	NSA_001
	C2 - Dudbridge Weir Stroudwater Canal	Continuous level recorder	SCA_005
	C3 - Thrupp River Frome	Continuous level recorder	RFA_220
	C4 - Golden Valley River Frome	Continuous level recorder	RFA_360 + (RFA_361 - RFA_360)*0.2581
	C5 - Egypt Mill Nailsworth Stream	Continuous level recorder	NSA_124
	M1 - Eastington River Frome	Peak level recorder	RFA_045 + (RFA_046 - RFA_045)*0.2575
	M3 - Ryeford Cableways	Peak level recorder	CELL 89A
	M4 - Ryeford South River Frome	Peak level recorder	RFA_109 + (RFA_110 - RFA_109)*0.5328
	M5 - Wallbridge River Frome	Peak level recorder	RFA_172 + (RFA_173 - RFA_172)*0.7936
	M6 - Brimscombe River Frome	Peak level recorder	RFA_265 + (RFA_266 - RFA_265)*0.7257

Table 13 Continued

Calibration event	Location	Record type	Equivalent model section
5 January 1994	M7 - Chalford River Frome	Peak level recorder	
	M8 - Upper Framilode River Frome	Peak level recorder	RFA_006 + (RFA_007 - RFA_006)*0.5806
	M10 - Woodchester Nailsworth Stream	Peak level recorder	NSA_050
30 May 1979	Ebley Mill gauging station	Continuous level recorder & flows	RFA_139
18 December 1965	d/s Red Lion PH	Observed level	RFA_331
	u/s Boume Mill	Observed level	RFA_271
	u/s Brimscombe Mill Pond Culvert	Observed level	RFA_253
	Brimscombe Mill Pond	Observed level	RFA_250
	u/s Thrupp Works	Observed level	RFA_238
	d/s Thrupp Works	Observed level	RFA_236
	u/s Phoenix Mills	Observed level	RFA_232
	d/s Griffin's Mill Bypass Weir	Observed level	RFA_216
	d/s Phoenix Mills	Observed level	RFP_003
	d/s Griffin's Mill	Observed level	RFO_008

Table 13 Continued

Calibration event	Location	Record type	Equivalent model section
18 December 1965	u/s Stafford's Mill	Observed level	RFA_208
	u/s Stanton's Bridge	Observed level	RFA_204
	d/s Butterow Bridge	Observed level	RFA_192
	d/s Eagle Mills	Observed level	RFA_189
	u/s Arundell Mill	Observed level	RFA_187

Table 14 Comparison of SALMON-F model and physical model levels at Ebley Mill

Discharge (m ³ /s)	Ebley Mill gauging station level (mOD)		Difference (m)
20	32.012	31.942	-0.070
25	32.033	32.015	-0.018
30	32.074	32.076	+0.002
35	32.099	32.130	+0.031
40	32.146	32.176	+0.030
45	32.200	32.232	+0.032
50	32.294	32.288	-0.006
55	32.416	32.359	-0.057
60	32.519	32.432	-0.087
67	32.606	32.572	-0.034
75	32.683	32.724	+0.041
90	32.799	32.958	+0.159

Table 15 Comparison of observed and predicted peak water levels - January 1994 calibration event

Gauge location	Peak water level (mOD)		
	Observed	Predicted	Difference (m)
C1	34.803	34.816	+0.013
C2	34.205	34.233	+0.028
C3	[see text]	48.306	-
C4	[see text]	79.670	-
C5	57.908	57.906	-0.002
M1	13.472	13.547	+0.075
M4	28.150	28.144	-0.006
M5	38.449 / 38.596	38.383	-0.066 / -0.213
M6	56.910 / 57.066	57.029	+0.119 / -0.037
M7	72.384	72.167	-0.217
M8	7.350	7.365	+0.015
M9	8.600	7.637	-0.963
M10	43.670	43.697	+0.027
Ebley Mill	31.686	31.744	+0.058
Peak flow (m3/s)			
Ebley Mill	11.84	12.97	11.32

Table 16 Comparison of observed and predicted peak water levels - May 1979 calibration event

Gauge location	Peak water level (mOD)		
	Observed	Predicted	Difference (m)
C1	-	31.588	-
C2	-	34.518	-
C3	-	48.429	-
C4	-	79.818	-
C5	-	58.126	-
M1	-	13.937	-
M3	-	26.590	-
M4	-	28.252	-
M5	-	38.601	-
M6	-	57.166	-
M7	-	72.245	-
M8	-	7.157	-
M9	-	7.546	-
M10	-	44.008	-
Ebley Mill	31.923	32.008	+0.085
Peak flow (m ³ /s)			
Ebley Mill	19.2	21.3	+1.9

Table 17 Comparison of observed and predicted peak water levels - December 1965 flood event

Gauge location / model section	Peak water level (mOD)		
	Observed level	Predicted level	Difference (m)
C1	-	35.234	-
C2	-	34.570	-
C3	-	48.463	-
C4	-	79.884	-
C5	-	58.136	-
M1	-	14.300	-
M3	-	26.594	-
M4	-	28.240	-
M5	-	38.634	-
M6	-	57.109	-
M7	-	72.328	-
M8	-	7.657	-
M9	-	7.927	-
M10	-	44.012	-
Ebley Mill	-	32.047	-
Peak flow (m ³ /s)			
Ebley Mill	-	24.133	-
Observed peak water levels (mOD)			
RFA_253 - u/s Brimscombe Mill Pond Culvert	55.960	56.024	+0.064
Ebley Mill	-	32.047	-
Peak flow (m ³ /s)			
Ebley Mill	-	24.133	-
Observed peak water levels (mOD)			
RFA_253 - u/s Brimscombe Mill Pond Culvert	55.960	56.024	+0.064

Table 17 Continued

Gauge location / model section	Peak water level (mOD)		
	Observed level	Predicted level	Difference (m)
Observed peak water levels (mOD)			
RFA_250 - Brimscombe Mill Pond	55.390	55.425	+0.035
RFA_238 - u/s Thrupp Works	52.020	51.984	-0.036
RFA_236 - d/s Thrupp Works	50.730	50.570	-0.160
RFA_232 - u/s Phoenix Mills	50.250	50.044	-0.206
RFA_216 - d/s Griffin's Mill Bypass Weir	47.860	47.901	+0.041
RFP_003 - d/s Phoenix Mills	48.770	48.611	-0.159
RFO_009 - d/s Griffin's Mill	47.610	47.679	+0.069
RFA_208 - u/s Stafford's Mill	46.900	46.864	-0.036
RFA_204 - u/s Stanton's Bridge	45.880	45.916	+0.036
RFA_192 - d/s Butterow Bridge	44.640	44.509	-0.131
RFA_189 - d/s Eagle Mills	43.410	43.555	+0.145
RFA_187 - u/s Arundell Mill	43.370	43.428	+0.058
RFA_184 - u/s Canal Syphon	42.720	42.461	-0.259
RFA_183 - d/s Canal Syphon	42.160	41.740	-0.420
RFA_182 - u/s Railway Mill	41.290	41.687	+0.397
RFA_175 - George Kent & Co., Wallbridge	39.720	39.314	-0.406

Table 17 Continued

Gauge location / model section	Peak water level (mOD)		
	Observed level	Predicted level	Difference (m)
Observed peak water levels (mOD)			
RFA_172 - Wallbridge	39.980	38.498	-1.482
RFA_146 - u/s Dudbridge Culvert	33.440	32.618	-0.822
RFA_118 - d/s Refuse Tip Weir 1	28.860	28.711	-0.149
RFA_114 - u/s Redhill Culvert	28.490	28.345	-0.145
RFA_106 - u/s Stanley Mills Bridge	28.020	28.124	+0.104
RFA_104 - u/s Stanley Mills Weir	27.830	28.107	+0.277
RFA_087 - d/s Stanley Downton Bridge	22.330	21.738	-0.592
RFA_078 - u/s Beards Mill	20.220	20.197	+0.023
RFA_074 - u/s Beards Mill road bridge	18.640	18.716	+0.076
RFA_054 - u/s Millend Mills	16.810	15.758	-1.052
RFA_053 - d/s Millend Mills	15.670	14.880	-0.790
RFA_046 - d/s Spring Hill Weir	14.470	14.330	-0.140
RFA_044 - u/s Meadow Mill	14.440	14.298	-0.142
RFD_080 - d/s Refuse Tip Weir 2	28.790	28.858	+0.068
RFD_075 - Ryeford North Channel	28.250	28.117	-0.133
RFD_061 - Upper Mills Bridge	25.370	25.060	-0.310
RFD_057 - u/s Upper Mills Sluices	24.980	24.958	-0.022

Table 17 Continued

Gauge location / model section	Peak water level (mOD)		
	Observed level	Predicted level	Difference (m)
Observed peak water levels (mOD)			
RFD_043 - u/s Bridgend Kennels Bridge	22.330	22.339	+0.009
RFD_038 - u/s Bridgend Mill Bridge	22.136	22.034	-0.102
RFD_033 - Lower Mills d/s Sluice	21.220	20.635	-0.585
RFD_025 - North Channel u/s Railway	19.480	19.483	+0.003
RFD_021 - u/s Bonds Mill	19.330	19.197	-0.133
RFD_017 - d/s Bonds Mill	16.880	16.751	-0.129
RFC_004 - Eastington church	14.940	14.765	-0.175
RFC_003 - u/s Eastington road bridge	14.660	14.756	+0.096
RFL_014 - Banty Ditch	25.540	25.018	-0.522
SCA_005 - Dudbridge Lock Weir	34.640	34.570	-0.070
CELL 52 - d/s Railway embankment	19.400	18.417	-0.070
CELL 81 - d/s Ryeford Road	25.950	24.979	-0.971
CELL 89 - Ryeford Saw Mills	26.740	26.604	-0.136
CELL 90 - Ryeford Saw Mills	28.094	27.491	-0.603
CELL 85 - Ryeford Canal	28.350	27.899	-0.451

Table 18 Final roughness parameters for the River Frome models

Model reach	Channel ks	Floodplain ks
Upper Frome sub-model		
RFA_175 - RFA_389	0.60	2.00
RFO_001 - RFO_012	0.60	2.00
RFP_001 - RFP_006	0.60	2.00
RFQ_001 - RFQ_004	0.60	2.00
RFR_001 - RFR_002	0.60	2.00
RFS_001 - RFS_007	0.60	2.00
RFT_001 - RFT_003	0.60	2.00
SCB_001 - SCB_024	0.60	2.00
SCC_001 - SCC_070	0.60	2.00
All Floodplain sections		2.00
Lower Frome sub-model		
NSA_001 - NSA_002	0.60	2.00
RFA_001 - RFA_032	0.60	2.00
RFA_033 - RFA_048	0.80	2.00
RFA_050 - RFA_053	1.50	2.00
RFA_049 - RFA_077	0.60	2.00
RFA_078 - RFA_087	1.50	2.00
RFA_088 - RFA_103	0.60	2.00
RFA_104 - RFA_118	1.00	2.00
RFA_119 - RFA_170	0.60	2.00
RFA_171 - RFA_175	2.00	2.00
RFB_001 - RFB_008	0.60	2.00
RFC_001 - RFC_009	1.50	2.00
RFD_001 - RFD_067	0.60	2.00
RFD_068 - RFD_081	1.00	2.00
RFF_001 - RFF_003	0.60	2.00
RFG_001 - RFG_006	0.60	2.00

Table 18 Continued

Model reach	Channel ks	Floodplain ks
Upper Frome sub-model		
RFJ_001 - RFJ_003	0.60	2.00
RFK_001 - RFK_004	0.60	2.00
RFL_001 - RFL_016	1.00	2.00
RFM_001 - RFM_003	0.60	2.00
RFH_001 - RFH_004	0.60	2.00
RFN_001 - RFN_006	0.60	2.00
RFX_001 - RFX_007	0.60	2.00
SCA_001 - SCA_016	0.60	2.00
RFE_001 - RFE_005	1.00	2.00
All Floodplain	-	2.00
Nailsworth Stream sub-model		
NSA_001 - NSA_124	0.60	2.00
NSB_001 - NSB_002	0.60	2.00
NSC_001 - NSC_016	0.60	2.00
NSD_001 - NSD_024	0.60	2.00
NSE_001 - NSE_002	0.60	2.00

Table 19 *Final structure coefficients - Upper Frome sub-model*

Structure Name	Element label	Element Type	Cd, K, Aff	Dr
Railway Mill Weir	GWRMLWR1	WR	1.50	0.67
	GWRMLWR2	WR	1.50	0.67
	GWRMLWR3	WR	1.50	0.67
	GWRMLWR4	WR	1.50	0.67
	GWRMLWR5	WR	1.50	0.67
Canal Syphon	THSEVSY	SY	0.50	0.67
Arundell Mill Sluices	ARUMLWR1	WR	0.90	0.67
	ARUMLWR2	WR	0.90	0.67
	ARUMLSL1	SL	0.90	0.67
	ARUMLSL2	SL	0.90	0.67
Eagle Mills	CVNWKUL	BR	10.00	
Butterow Hill Bridge	BUTHILBR	BR	1.00	
Bowbridge Estate Bridge	BOWESBR1	BR	1.00	
Housing Estate Link Bridge	BOWESBR2	BR	1.00	
Stanton's Bridg	BUTFTPBR	BR	0.70	
Stafford Mills	THRUPSL1	SL	0.80	0.67
	THRUPSL2	SL	0.80	0.67
	THRUPWR1	WR	0.80	0.67
	THRUPWR2	WR	0.40	0.67
Griffin's Mill Footbridge	GRFMLBR1	HL	0.73	
Griffin's Mill Bypass Weir	GRF8YSL1	SL	0.90	0.67
	GRF8YWR1	WR	1.00	0.67
	GRF8YWR2	WR	1.00	0.67
	GRF8YWR3	WR	0.40	0.67
Griffin Mill Estate Bridge	GRFACSBR	BR	1.00	

Table 19 Continued

Structure Name	Element label	Element Type	Cd, K, Aff	Dr
Griffin Mill Estate Bridge 2	GRFMLBR2	BR	1.00	
Phoenix Mill Bypass Channel Bridge	BROOKBR1	BR	1.00	
Phoenix Mill Lock Footbridge	HAMLCKBR	BR	1.00	
Swimming Pool Footbridge	SWMPOLBR	BR	1.00	
Phoenix Mill Bypass Weir	PHXBYWR1	WR	0.70	0.67
	PHXBYWR2	WR	0.40	0.67
	PHXBYWR3	WR	0.50	0.67
	PHXBYSL1	SL	0.70	0.67
Thrupp Works Bridge 1	PHXACSB	BR	1.00	
Thrupp Works Bridge 2	PHXFTPBR	BR	1.00	
Thrupp Works Sluices	PHXESSL1	SL	0.70	0.67
	PHXESWR1	WR	0.80	0.67
	PHXESWR2	WR	0.50	0.67
	PHXESWR3	WR	0.40	0.40
Thrupp Works Bridge 3	HAKSIDBR	BR	1.00	
Caravan Park Bridge	THPCVNBR	BR	1.00	
Brimscombe Mill Pond Sluices	BRIPOSL1	SL	1.00	0.67
	BRIPOSL2	SL	1.00	0.67
	BRIPOWR1	WR	0.40	0.40
Brimscombe Mill Pond Culvert	BRIPOCUL	HL	0.50	
Brimscombe Hill Bridge	BRIMSCBR	BR	1.00	
Brimscombe Port Exit Bridge	BURKETBR	BR	1.00	

Table 19 Continued

Structure Name	Element label	Element Type	Cd, K, Aff	Dr
Brimscombe Mill Culvert	BENSNBR1	BR	1.00	
Brimscombe Mill Access Bridge	BENSNBR2	HL	0.15	
Brimscombe Mill Sluices	PTINDSL1	SL	0.80	0.67
	PTINDWR1	WR	0.80	0.67
	PTINDWR2	WR	0.80	0.67
Brimscombe Port Bridge	PORTINBR	BR	1.00	
Boume Mill Bypass Sluices	BORMLWR1	WR	0.70	0.67
	BORMLWR2	WR	0.40	0.40
Wimberley Mills Weir	WIMMLWR1	WR	1.00	0.67
	WIMMLWR2	WR	1.00	0.67
	WIMMLWR3	WR	0.90	0.67
	WIMMLWR4	WR	0.40	0.67
	WIMMLWR5	WR	0.40	0.40
Knapp Lane Bridge	WIMBERBR	BR	1.00	
Wimberley Mills Culvert 1	WIMBCUL1	HL	0.04	
Wimberley Mills Culvert 2	WIMBCUL2	HL	0.53	
St Marys Mill Weir	MARCNR1	WR	1.00	0.67
	MARCNR2	WR	1.00	0.67
St Marys Mill Bypass Sluices	MARBYSL1	SL	0.70	0.67
	MARBYSL2	SL	0.80	0.67
St Marys House Culvert	MARHSCUL	BR	1.00	
Iles Mill Railway Culvert	ILERLCUL	BR	1.00	
Iles Mill Bridge	ILESMLBR	BR	1.00	

Table 19 Continued

Structure Name	Element label	Element Type	Cd, K, Aff	Dr
Iles Mill Bypass Weirs	ILEUPWR1	WR	0.80	0.67
	ILEUPSL1	SL	0.80	0.67
Belvedere Mill	BELVEWR1	WR	1.00	0.67
	BELVEWR2	WR	1.00	0.67
Belvedere Pond Bridge	BELVMLBR	BR	1.00	
Chalford Industrial Estate	CHINDSL1	SL	0.70	0.67
	CHINDSL2	SL	0.80	0.67
	CHINDSL3	SL	0.50	0.67
Chalford Chairs Culvert	CHLCHCUL	HL	0.50	
Thanet House Bridge	THANHOBR	SL	1.50	0.80
Red Lion Bridge	REDLINBR	HL	0.32	
Brooklyn Bridge	BRKLYNBR	BR	1.00	
Sub Str. Bridge	SUBSTNBR	BR	1.00	
Ridley Mill Sluices	RIDLYSL1	SL	1.00	0.67
	RIDLYWR1	WR	0.70	0.67
Harley Lane Culverts	HARLEY8BR	BR	1.00	
Ashmeade Sluices	ASHMDWR1	WR	0.90	0.67
	ASHMDWR2	WR	0.90	0.67
	ASHMDWR4	WR	0.70	0.67
Bakers Bridge	BAKERSBR	SL	0.90	0.67
Bakers Mill Sluices	BAKERWR1	WR	0.80	0.67
	BAKERWR2	WR	0.80	0.67
	BAKERSL1	SL	1.00	0.67
Puck Mill Culvert	PUCKCULV	SL	0.50	0.67

Table 19 Continued

Structure Name	Element label	Element Type	Cd, K, Aff	Dr
Clinson House Footbridge	GRFMLBR3	BR	1.00	
Griffin's Mill d/s Weir	GRFMLWR1	WR	0.90	0.67
	GRFMLWR2	WR	1.00	0.67
	GRFMLWR3	WR	0.40	0.40
Griffin's Mill Culvert	GRFMFCUV	HL	0.35	
Griffin's Mill u/s Weir	GRFMLWR4	WR	0.80	0.67
	GRFMLWR5	WR	0.80	0.67
	GRFMLWR6	WR	0.90	0.67
Phoenix Mill Stream Bridge	BROOKBR2	BR	1.00	
Phoenix Mill	PHXMSL1	SL	0.80	0.67
Bourne Mill Sluices	BORMSL1	SL	0.80	0.67
	BORMSL2	SL	0.80	0.67
St Marys Mill Culvert	MARMSL1	SL	1.10	0.67
Iles Mill Culvert	ILEMSL1	SL	1.00	0.67
	ILEMSL2	SL	0.90	0.67
	ILEMLWR1	WR	0.90	0.67
Iles Mill Bypass Sluices	ILEBYSL1	SL	0.80	0.67
Butterow Hill Canal Bridge	BUTCANBR	HL	1.40	
Bowbridge Lock Weir	BOWLCKWR	WR	1.00	0.67
Griffin's Mill Lock Weir	GRIFMLWR	WR	1.00	0.67
Phoenix Mill Lock Weir	HAMLCKWR	WR	1.00	0.67
Wimberley lock Weir	WIMCNSL1	SL	0.80	0.67
	WIMCNWR1	WR	1.00	0.67
	WIMCNWR2	WR	1.00	0.67

Table 19 Continued

Structure Name	Element label	Element Type	Cd, K, Aff	Dr
Iles Mill Lock Weir	ILELCKWR	WR	1.00	0.67
Springside Canal Culvert	BELMLCUL	WR	0.90	0.67
Greystones Canal Culvert	CHCANCV1	SL	0.90	0.67
Chalford Canal Culvert	CHCANCV2	SL	0.90	0.67
Cowcombe Hill Culvert	CHCHCNCV	SL	0.50	0.67
Clowes Lock Weir	CLOWESWR	WR	0.40	0.67
Golden Valley lock Weir	GOLDVWR1	WR	1.00	0.67
	GOLDVWR2	WR	1.00	0.67
Bakers Mill Lower Lock	BAKCNWR1	WR	0.90	0.67
	BAKCNWR2	WR	0.90	0.67
	BAKCNSL1	SL	0.80	0.67
Bakers Mill Upper Lock	BAKCNWR3	WR	1.10	0.67
	BAKCNWR4	WR	1.00	0.67
	BAKCNWR5	WR	1.00	0.67
Puck Mill Lower Lock	PUCKMSL1	SL	0.80	0.67
	PUCKMWR1	WR	0.90	0.67
Puck Mill Upper Lock	PUCKMWR2	WR	0.90	0.67
Whitehall Lower Lock	WHITEHWR	WR	1.00	0.67
	WHITESL1	SL	0.80	0.67

Table 20 Final structure coefficients - Lower Frome sub-model

Structure Name	Element label	Element Type	Cd, K, Aff	Dr
Dudbridge Weir	NLSOUTWR	WR	0.90	0.67
	NLSOUTSL	SL	0.90	0.67
River Severn Outfall	RIVSEVFL	FL	0.80	0.67
Upper Framilode Weir	UFRAMSL1	SL	0.90	0.10
	UFRAMSL2	SL	0.40	0.67
	UFRAMSL3	SL	0.40	0.67
	UFRAMSL4	SL	0.40	0.67
G&S canal West Siphon	GSCLHCSY	SY	0.80	0.67
Whitminster West Channel Weir	WHILHWR1	WR	0.90	0.67
	WHILHWR2	WR	0.60	0.67
	WHILHWR3	WR	0.60	0.67
	WHILHWR4	WR	0.60	0.67
Whitminster Bridge	WHITMIBR	BR	1.00	
Wheatenhurst Sluices	WHEATESL	SL	0.80	0.67
	WHEATWR1	WR	0.80	0.67
	WHEATWR2	WR	0.90	0.67
Walk Rhine Bridge	WALKRHBR	BR	1.00	
Fromebridge Mill	FROMEWR1	WR	0.80	0.67
	FROMEWR2	WR	0.80	0.67
	FROMEWR3	WR	0.80	0.67
	FROMESLS	SL	0.80	0.67
A38 Road Bridge	A38RODBR	BR	1.00	
M5 Road Bridge	M5ROADBR	BR	1.00	
Meadow Mill	MEADOWHL	HL	1.50	
Meadow Bridge	MEADOWBR	BR	1.00	

Table 20 Continued

Structure Name	Element label	Element Type	Cd, K, Aff	Dr
Millend Mills	MILLES1	SL	0.80	0.67
	MILLES2	SL	0.80	0.67
	MILLES3	SL	0.50	0.67
	MILLES4	SL	0.50	0.67
	MILLES5	SL	0.50	0.67
Beards Mill Bridge	BEARMIBR	BR	1.00	
Beards Mill Side Weir	BEARDWR1	WR	0.50	0.67
	BEARDWR2	WR	0.20	0.67
Stanley Downton Bridge	STDOWNBR	BR	1.00	
Stanley Mills Weir	STANMSL1	SL	1.10	0.67
	STANMSL2	SL	1.10	0.67
	STANMSL3	SL	1.10	0.67
	STANMSL4	SL	1.10	0.67
	STANMSL5	SL	1.10	0.67
Stanley Mills Bridge	STANMIBR	BR	1.00	
Redhill Culvert	REDHILBR	BR	50.00	
Refuse Tip Weir 1	REFWR3-1	WR	0.90	0.95
	REFWR3-2	WR	0.40	0.40
Ebley Corn Mill Sluices	EBCORNSL	SL	0.80	0.67
Ebley Corn Mill Bridge	EBCORNBR	BR	1.00	
Ebley Mill Bridge	EBMILLBR	BR	1.00	
Ebley Mill Weir	EBLMLWR1	WR	1.10	0.67
	EBLMLWR2	WR	0.85	0.67
	EBLMLWR3	WR	0.60	0.67
Dudbridge Road Culvert	DUDBRUL	SL	0.90	0.67

Table 20 Continued

Structure Name	Element label	Element Type	Cd, K, Aff	Dr
Redlers Mill Sluices	REDLRSL1	SL	0.80	0.67
	REDLRWR1	WR	0.80	0.67
	REDLRWR2	WR	0.80	0.67
	REDLRWR2	WR	0.80	0.67
Fromehall Mill Bypass Sluices	FROMLWR1	WR	0.90	0.67
	FROMLWR2	WR	0.90	0.67
	FROMLSL1	SL	0.70	0.67
	FROMLSL2	SL	0.70	0.67
	FROMLWR3	WR	0.80	0.67
Fromehall Mill Bridge	FRMILLBR	BR	1.00	
Lodgemore Bridge	LOMILLBR	BR	1.00	
Lodgemore Mills Sluices	LODMLS1	SL	0.90	0.67
	LODMLWR1	WR	0.80	0.67
	LODMLWR2	WR	0.70	0.67
Lodgemore Mills Culvert	LOMILLCU	HL	1.00	
Bath Road Bridge	A46BRDBR	BR	5.00	
Spring Hill Bridge	SPRINGBR	BR	50.00	
G&S Canal East Siphon	GSCRHCSY	SY	0.80	0.67
Whitminster East Channel Weir	WHIRHSL1	SL	0.90	0.67
	WHIRHSL2	SL	0.40	0.67
	WHIRHSL3	SL	0.40	0.67
	WHIRHSL4	SL	0.40	0.67
	WHIRHSL5	SL	0.40	0.67
	WHIRHWR1	WR	0.40	0.67
Spring Hill Weir	CARVPWR1	WR	0.60	0.67
	CARVPWR2	WR	0.60	0.67

Table 20 Continued

Structure Name	Element label	Element Type	Cd, K, Aff	Dr
Churchend Bridge	CHESCHBR	BR	50.00	
Churchend Weir	CHESCWR1	WR	1.00	0.67
	CHESCWR2	WR	1.00	0.67
Millend Lane Bridge	MILENDBR	BR	1.00	
Churchend Sluices	CHESLSL1	SL	0.80	0.67
	CHESLSL2	SL	0.80	0.67
	CHESLSL3	SL	0.80	0.67
Bonds Mill	BONCUSL1	SL	0.40	0.20
	BONCUSL2	SL	0.40	0.20
GWR Embankment Bridge	GWREMBBR	HL	0.30	
Ocean Pool Bridge	OCPOOLBR	BR	10.00	
Bridgend Mill Side Weir	BRIDGSL1	SL	0.60	0.67
	BRIDGSL2	SL	0.70	0.67
Bridgend Mill Bridge	BRIDMIBR	BR	5.00	
Bridgend Kennels Bridge	BRKENNBR	BR	1.00	
Bridgend Kennels Sluice	BRIKENSL	SL	0.70	0.67
Downton Road Footbridge	DOWNFTBR	BR	1.00	
Upper Mills Footbridge	UPMIFTBR	BR	1.00	
Upper Mills Sluices	UPMILLSL	SL	0.70	0.67
Upper Mills Bridge	UPMILLBR	BR	5.00	
Ryeford Saw Mills Culvert	RYEFDL1	SL	0.60	0.67
	RYEFDL2	SL	0.60	0.67
	RYEFDWR1	WR	0.20	0.00

Table 20 Continued

Structure Name	Element label	Element Type	Cd, K, Aff	Dr
Refuse Tip Weir 3	REFWR1-1	WR	0.60	0.67
Refuse Tip Weir 2	REFWR2-1	WR	0.80	0.80
	REFWR2-2	WR	0.80	0.80
Market Garden Weir	MARGDWR1	WR	0.70	0.67
	MARGDWR2	WR	0.40	0.67
Beards Mill	BEARDWR3	WR	0.001	0.67
	BEARDWR4	WR	0.20	0.67
Bonds Mill Side Sluices	BONSLSL1	SL	0.40	0.20
	BONSLSL2	SL	0.40	0.20
	BONSLSL3	SL	0.40	0.20
	BONSLSL4	SL	0.40	0.20
Ebley Corn Mill Culverts	EBCNCUL1	SL	1.00	0.67
	EBCNCUL2	SL	1.00	0.67
Bridgend Mill Culvert	BRIDGCUL	WR	0.70	0.67
Bridgend Mill Bypass	BRIDGBYP	WR	0.60	0.67
Banty Ditch Culvert	BANTYCUL	HL	1.00	
Banty Ditch Weir	BANTYDWR	WR	0.70	0.67
Fromehall Mill Sluice	FRMHLCL1	SL	0.90	0.67
	FRMHLCL2	SL	0.90	0.67
Dudbridge Lock Weir	DUDLCKWR	WR	1.00	0.67
Printing Works Lock Weir	RUSBRKWR	WR	1.00	0.67
Lodgmore Canal Weir	PSWCKSWR	WR	1.00	0.67
Cainscross Road Lock Weir	CAINSWR1	WR	1.00	0.67
	CAINSWR2	WR	1.00	0.67

Table 21 Final structure coefficients - Nailsworth Stream sub-model

Structure Name	Element label	Element Type	Cd, K, Aff	Dr
Dudbridge Weir	NSOUTFWR	WR	1.00	0.67
	NSOUTFSL	SL	0.90	0.67
Selsley Hill Culvert	SESLYCV	BR	1.00	
Erinoid Downstream Control Weir	GANTRYWR	WR	0.90	0.67
Erinoid Culvert	ERINODCV	HL	1.00	
Erinoid Bridge	ERINODBR	SL	0.90	0.67
Car Park Bridge	CARPRKBR	BR	1.00	
Cotswold House Bridge	COTSHOBR	HL	0.04	
New Tynings Footbridge	NEWTYNBR	BR	1.00	
Priory Bridge	PRIORYBR	HL	0.3	
Rooksmoor Mill Right Channel Culvert	RKSMRCVR	SL	1.00	0.67
Rooksmoor Mill Weir	RKSMRWR1	WR	0.80	0.67
	RKSMRWR2	SL	0.80	0.67
Selsley road Bridge	SESLYBR	BR	1.00	
Selsley Road Weir	SESLYWR	WR	0.90	0.67
Paul's Rise Bridge	PAULSRBR	BR	1.00	
Railway Bridge	NSRAILBR	BR	1.00	
Forge Weir	FORGEWR	WR	0.90	0.67
Birds Crossing Bridge	BIRDSXBR	BR	1.00	

Table 21 Continued

Structure Name	Element label	Element Type	Cd, K, Aff	Dr
Station Road Works	STRODSL1	SL	0.70	0.67
	STRODWR1	WR	0.40	0.67
	STRODWR2	WR	0.40	0.67
	STRODSL2	SL	0.80	0.67
	STRODSL3	SL	0.80	0.67
Station Road Bridge	STRODSL4	SL	0.90	0.67
	STRODWR3	WR	0.40	0.67
South Woodchester Works Bridge	STHWODBR	BR	1.00	
Frogmarsh Lane Bridge	FROGMSBR	HL	0.16	
Bath Road Bridge	BATHRDBR	BR	1.00	
Merrett's Mills Bridge	MERRMIBR	BR	1.00	
Merrett's Mills Culvert	MERRETSL	HL	0.94	
Inchbrook Bridge	INCHBKBR	BR	1.00	
Inchbrook Culvert	INCHBKSL	HL	0.01	
Critchley's Bridge 1	CRITHBR1	BR	1.00	
Critchley's New Culvert	CRITHNCV	BR	1.00	
Critchley's Bridge 2	CRITHBR2	BR	1.00	
Dunkirk Mills Culvert	DUNKRSL1	SL	0.90	0.67
Garage Culvert	GARAGECV	BR	1.00	
Egypt Mill Weir	EGYPTWR1	WR	0.90	0.67
	EGYPTWR2	WR	0.90	0.67
	EGYPTWR3	WR	0.90	0.67

Table 21 Continued

Structure Name	Element label	Element Type	Cd, K, Aff	Dr
Rooksmoor Mill Left Channel Culvert	RKSMRSL1	SL	0.80	0.67
	RKSMRSL2	SL	0.80	0.67
Critchley's Left Channel Culvert	CRITRDWR	WR	0.90	0.40
	CRITHSL2	SL	1.00	0.67
Critchley's Bridge 3	CRITHBR3	BR	1.00	
Critchley's Bridge	CRITHBR4	BR	1.00	
Tennis Court Bridge 2	TENISBR2	HL	0.10	
Dunkirk Mills Bridge 1	DUNKRBR1	BR	1.00	
Dunkirk Mills Side Spills	DUNKRWR1	WR	0.90	0.67
	DUNKRWR2	WR	0.90	0.67
	DUNKRSL2	SL	0.90	0.67
Critchley's Bridge 5	CRITHSL1	SL	0.90	0.67
Tennis Court Bridge 1	TENNISBR	BR	1.00	
Elm Brook Bridge	ELMBRKBR	BR	1.00	
Gables Bridge	GABLESBR	BR	1.00	
Dunkirk Mills Entrance Bridge	DUNKRBR2	BR	1.00	
Filling Station Culvert	FILSTCV1	SL	0.90	0.67
	FILSTCV2	WR	0.40	0.67

Table 22 Design event return period water levels

Location	5 year	10 year	25 year	50 year	100 year	150 year
C1	34.979	35.154	35.407	35.654	35.948	36.306
C2	34.349	34.470	34.667	34.838	35.001	35.105
C3	48.350	48.414	48.515	48.592	48.647	48.684
C4	79.747	79.797	79.836	80.005	80.145	80.239
C5	57.991	58.082	58.228	58.463	58.923	59.264
M1	13.745	14.161	14.276	14.350	14.416	14.437
M3	26.461	26.464	26.500	26.563	26.629	26.785
M4	28.189	28.222	28.259	28.276	28.294	28.302
M5	38.459	38.573	38.726	38.978	39.080	39.161
M6	57.026	57.033	57.168	57.287	57.407	57.494
M7	72.175	72.227	72.288	72.471	72.582	72.642
M8	7.864	7.900	7.985	8.042	8.060	8.156
M9	7.999	8.043	8.150	8.185	8.199	8.336
M10	43.826	43.955	44.161	44.631	45.157	45.669
Ebley Mill	31.859	31.981	32.089	32.158	32.196	32.228
Peak flow (m ³ /s)						
Ebley Mill						
	16.4	20.4	26.9	31.0	37.2	40.7

Table 23 Additional modelling downstream of Wheatenhurst Sluices - 4.88m peak level tide

Section Label	5 Year Event	10 Year Event	25 Year Event	50 Year Event	100 Year Event
RFA_001	4.88	4.88	4.88	4.88	4.88
River Severn Tidal Outfall					
RFA_001A	7.01	7.12	7.13	7.16	7.22
RFA_002	7.26	7.36	7.37	7.40	7.45
Upper Framilode Weir					
RFA_003	8.20	8.32	8.33	8.36	8.42
RFA_004	8.32	8.43	8.44	8.48	8.54
RFA_005	8.44	8.56	8.57	8.60	8.66
Junction with RFB_001					
RFA_006	8.44	8.56	8.57	8.60	8.66
RFA_007	8.52	8.64	8.65	8.68	8.74
RFA_008	8.60	8.70	8.72	8.74	8.80
RFA_008A	8.65	8.75	8.76	8.78	8.83
Gloucester & Sharpness Canal - Left Syphon					
RFA_009	8.70	8.84	8.86	8.88	8.95
RFA_010	8.73	8.88	8.90	8.92	8.99
RFA_011	8.73	8.88	8.90	8.93	9.00
RFA_012	8.74	8.89	8.91	8.93	9.00
Whitminster Weir - Left					
RFA_013	8.78	8.93	8.94	8.97	9.04
Junction with RFB_008					
RFA_014	8.78	8.93	8.94	8.97	9.04
RFA_015	8.78	8.92	8.94	8.96	9.03
RFA_016	8.78	8.92	8.94	8.96	9.04
RFA_017	8.80	8.94	8.96	8.98	9.05
RFA_018	8.81	8.95	8.97	8.99	9.06
Wheatenhurst Sluice					
RFA_019	10.15	10.07	10.09	10.13	10.08

Table 23 Continued

Section Label	5 Year Event	10 Year Event	25 Year Event	50 Year Event	100 Year Event
RFB_001	8.44	8.56	8.57	8.60	8.66
RFB_002	8.49	8.60	8.61	8.65	8.71
RFB_003	8.52	8.63	8.64	8.68	8.74
Gloucester & Sharpness Canal - Right Syphon					
RFB_004	8.67	8.82	8.84	8.87	8.94
RFB_005	8.73	8.88	8.90	8.92	8.99
RFB_006	8.74	8.89	8.91	8.93	9.00
RFB_007	8.76	8.90	8.92	8.94	9.01
Whitminster Weir - Right					
RFB_008	8.78	8.93	8.94	8.97	9.04
Floodplain Cells					
Cell 1	8.20	8.48	8.56	8.65	8.71
Cell 2	8.10	8.23	8.56	8.65	8.71
Cell 3	8.73	8.88	8.90	8.92	9.00
Cell 4	8.74	8.88	8.90	8.93	9.00
Cell 5	8.74	8.89	8.91	8.93	9.00
Cell 6	8.20	8.20	8.20	8.20	8.87
Cell 7	8.40	8.40	8.40	8.40	8.87
Cell 8	8.80	8.80	8.80	8.80	8.80
Cell 9	8.37	8.37	8.37	8.37	8.37
Cell 10	8.39	8.39	8.39	8.39	8.39

Table 24 Additional modelling downstream of Wheatenhurst Sluices - 6.00m peak level tide

Section Label	5 Year Event	10 Year Event	25 Year Event	50 Year Event	100 Year Event
RFA_001	6.00	6.00	6.00	6.00	6.00
River Severn Tidal Outfall					
RFA_001A	7.01	7.12	7.13	7.16	7.22
RFA_002	7.26	7.36	7.37	7.40	7.45
Upper Framilode Weir					
RFA_003	8.20	8.32	8.33	8.36	8.42
RFA_004	8.32	8.43	8.44	8.48	8.54
RFA_005	8.44	8.56	8.57	8.60	8.66
Junction with RFB_001					
RFA_006	8.44	8.56	8.57	8.60	8.66
RFA_007	8.52	8.64	8.65	8.68	8.74
RFA_008	8.60	8.70	8.72	8.74	8.80
RFA_008A	8.65	8.75	8.76	8.78	8.83
Gloucester & Sharpness Canal - Left Syphon					
RFA_009	8.70	8.84	8.86	8.88	8.95
RFA_010	8.73	8.88	8.90	8.92	8.99
RFA_011	8.73	8.88	8.90	8.93	9.00
RFA_012	8.74	8.89	8.91	8.93	9.00
Whitminster Weir - Left					
RFA_013	8.78	8.93	8.94	8.97	9.04
Junction with RFB_008					
RFA_014	8.78	8.93	8.94	8.97	9.04
RFA_015	8.78	8.92	8.94	8.96	9.03
RFA_016	8.78	8.92	8.94	8.96	9.04
RFA_017	8.80	8.94	8.96	8.98	9.05
RFA_018	8.81	8.95	8.97	8.99	9.06
Wheatenhurst Sluice					
RFA_019	10.15	10.07	10.09	10.13	10.08

Table 24 Continued

Section Label	5 Year Event	10 Year Event	25 Year Event	50 Year Event	100 Year Event
RFB_001	8.44	8.56	8.57	8.60	8.66
RFB_002	8.49	8.60	8.61	8.65	8.71
RFB_003	8.52	8.63	8.64	8.68	8.74
Gloucester & Sharpness Canal - Right Syphon					
RFB_004	8.67	8.82	8.84	8.87	8.94
RFB_005	8.73	8.88	8.90	8.92	8.99
RFB_006	8.74	8.89	8.91	8.93	9.00
RFB_007	8.76	8.90	8.92	8.94	9.01
Whitminster Weir - Right					
RFB_008	8.78	8.93	8.94	8.97	9.04
Floodplain Cells					
Cell 1	8.20	8.48	8.56	8.65	8.71
Cell 2	8.10	8.23	8.56	8.65	8.71
Cell 3	8.73	8.88	8.90	8.92	9.00
Cell 4	8.74	8.88	8.90	8.93	9.00
Cell 5	8.74	8.89	8.91	8.93	9.00
Cell 6	8.20	8.20	8.20	8.20	8.87
Cell 7	8.40	8.40	8.40	8.40	8.87
Cell 8	8.80	8.80	8.80	8.80	8.80
Cell 9	8.37	8.37	8.37	8.37	8.37
Cell 10	8.39	8.39	8.39	8.39	8.39

Table 25 Additional modelling downstream of Wheatenhurst Sluices - 8.00m peak level tide

Section Label	5 Year Event	10 Year Event	25 Year Event	50 Year Event	100 Year Event
RFA_001	8.00	8.00	8.00	8.00	8.00
River Severn Tidal Outfall					
RFA_001A	8.11	8.14	8.16	8.18	8.22
RFA_002	8.14	8.18	8.20	8.22	8.27
Upper Framilode Weir					
RFA_003	8.43	8.49	8.54	8.57	8.65
RFA_004	8.47	8.54	8.59	8.62	8.71
RFA_005	8.55	8.60	8.65	8.67	8.77
Junction with RFB_001					
RFA_006	8.55	8.60	8.65	8.67	8.77
RFA_007	8.60	8.66	8.71	8.74	8.83
RFA_008	8.66	8.71	8.76	8.79	8.87
RFA_008A	8.70	8.75	8.80	8.82	8.90
Gloucester & Sharpness Canal - Left Syphon					
RFA_009	8.75	8.84	8.88	8.91	8.97
RFA_010	8.77	8.88	8.92	8.95	9.00
RFA_011	8.77	8.89	8.93	8.96	9.00
RFA_012	8.78	8.90	8.94	8.97	9.01
Whitminster Weir - Left					
RFA_013	8.81	8.93	8.97	9.00	9.04
Junction with RFB_008					
RFA_014	8.81	8.93	8.97	9.00	9.04
RFA_015	8.81	8.92	8.96	8.99	9.03
RFA_016	8.81	8.93	8.97	9.00	9.04
RFA_017	8.83	8.95	8.98	9.01	9.06
RFA_018	8.84	8.96	8.99	9.02	9.07
Wheatenhurst Sluice					
RFA_019	10.15	10.07	10.09	10.13	10.08

Table 25 Continued

Section Label	5 Year Event	10 Year Event	25 Year Event	50 Year Event	100 Year Event
RFB_001	8.55	8.60	8.65	8.67	8.77
RFB_002	8.58	8.62	8.65	8.68	8.80
RFB_003	8.60	8.64	8.69	8.71	8.81
Gloucester & Sharpness Canal - Right Syphon					
RFB_004	8.72	8.83	8.87	8.90	8.96
RFB_005	8.77	8.88	8.92	8.95	9.00
RFB_006	8.78	8.89	8.94	8.97	9.01
RFB_007	8.79	8.91	8.94	8.97	9.01
Whitminster Weir - Right					
RFB_008	8.81	8.93	8.97	9.00	9.04
Floodplain Cells					
Cell 1	8.20	8.48	8.65	8.68	8.80
Cell 2	8.10	8.46	8.65	8.68	8.80
Cell 3	8.77	8.89	8.93	8.96	9.00
Cell 4	8.77	8.89	8.93	8.96	9.00
Cell 5	8.77	8.89	8.93	8.96	9.01
Cell 6	8.20	8.20	8.20	8.20	8.98
Cell 7	8.40	8.40	8.40	8.40	8.98
Cell 8	8.80	8.80	8.80	8.80	8.97
Cell 9	8.37	8.37	8.37	8.37	8.97
Cell 10	8.39	8.39	8.39	8.39	8.97

Table 26 Additional modelling downstream of Wheatenhurst Sluices - 10.00m peak level tide

Section Label	5 Year Event	10 Year Event	25 Year Event	50 Year Event	100 Year Event
RFA_001	10.00	10.00	10.00	10.00	10.00
River Severn Tidal Outfall					
RFA_001A	9.04	9.07	9.13	9.17	9.31
RFA_002	9.04	9.07	9.13	9.17	9.31
Upper Framilode Weir					
RFA_003	9.04	9.07	9.13	9.17	9.31
RFA_004	9.06	9.09	9.15	9.19	9.32
RFA_005	9.09	9.12	9.17	9.22	9.35
Junction with RFB_001					
RFA_006	9.09	9.12	9.17	9.22	9.35
RFA_007	9.11	9.14	9.19	9.23	9.37
RFA_008	9.12	9.14	9.20	9.24	9.37
RFA_008A	9.13	9.16	9.22	9.26	9.39
Gloucester & Sharpness Canal - Left Syphon					
RFA_009	9.16	9.20	9.28	9.32	9.44
RFA_010	9.17	9.22	9.30	9.35	9.46
RFA_011	9.18	9.22	9.31	9.35	9.46
RFA_012	9.18	9.23	9.31	9.36	9.46
Whitminster Weir - Left					
RFA_013	9.19	9.24	9.32	9.37	9.47
Junction with RFB_008					
RFA_014	9.19	9.24	9.32	9.37	9.47
RFA_015	9.19	9.24	9.32	9.37	9.47
RFA_016	9.20	9.24	9.33	9.37	9.48
RFA_017	9.20	9.25	9.33	9.38	9.48
RFA_018	9.21	9.25	9.34	9.38	9.48
Wheatenhurst Sluice					
RFA_019	10.15	10.07	10.10	10.14	10.10

Table 26 Continued

Section Label	5 Year Event	10 Year Event	25 Year Event	50 Year Event	100 Year Event
RFB_001	9.09	9.12	9.17	9.22	9.35
RFB_002	9.11	9.13	9.19	9.23	9.36
RFB_003	9.12	9.14	9.19	9.23	9.37
Gloucester & Sharpness Canal - Right Syphon					
RFB_004	9.16	9.21	9.29	9.34	9.45
RFB_005	9.18	9.23	9.31	9.35	9.46
RFB_006	9.18	9.23	9.31	9.36	9.46
RFB_007	9.19	9.23	9.32	9.36	9.46
Whitminster Weir - Right					
RFB_008	9.19	9.24	9.32	9.37	9.47
Floodplain Cells					
Cell 1	9.11	9.14	9.19	9.23	9.37
Cell 2	9.11	9.14	9.19	9.23	9.37
Cell 3	9.18	9.23	9.31	9.35	9.46
Cell 4	9.18	9.23	9.31	9.36	9.46
Cell 5	9.18	9.23	9.31	9.36	9.46
Cell 6	9.17	9.22	9.31	9.35	9.46
Cell 7	9.17	9.22	9.31	9.35	9.46
Cell 8	9.16	9.22	9.31	9.36	9.46
Cell 9	9.07	9.16	9.32	9.37	9.47
Cell 10	9.05	9.14	9.25	9.30	9.42

Table 27 Additional modelling downstream of Wheatenhurst Sluices - 10.50m peak level tide

Section Label	5 Year Event	10 Year Event	25 Year Event	50 Year Event	100 Year Event
RFA_001	10.50	10.50	10.50	10.50	10.50
River Severn Tidal Outfall					
RFA_001A	9.15	9.16	9.17	9.19	9.36
RFA_002	9.16	9.18	9.20	9.21	9.36
Upper Framilode Weir					
RFA_003	9.16	9.18	9.21	9.24	9.37
RFA_004	9.16	9.18	9.24	9.26	9.40
RFA_005	9.16	9.19	9.25	9.29	9.44
Junction with RFB_001					
RFA_006	9.16	9.19	9.25	9.29	9.44
RFA_007	9.17	9.21	9.27	9.31	9.45
RFA_008	9.18	9.21	9.28	9.32	9.46
RFA_008A	9.20	9.23	9.30	9.34	9.47
Gloucester & Sharpness Canal - Left Syphon					
RFA_009	9.23	9.27	9.35	9.40	9.52
RFA_010	9.25	9.30	9.38	9.43	9.54
RFA_011	9.25	9.30	9.39	9.43	9.54
RFA_012	9.25	9.30	9.39	9.43	9.54
Whitminster Weir - Left					
RFA_013	9.26	9.32	9.40	9.45	9.55
Junction with RFB_008					
RFA_014	9.26	9.32	9.40	9.45	9.55
RFA_015	9.26	9.31	9.40	9.45	9.55
RFA_016	9.26	9.32	9.41	9.46	9.56
RFA_017	9.27	9.32	9.41	9.46	9.56
RFA_018	9.27	9.33	9.41	9.46	9.57
Wheatenhurst Sluice					
RFA_019	10.15	10.08	10.11	10.14	10.10

Table 27 Continued

Section Label	5 Year Event	10 Year Event	25 Year Event	50 Year Event	100 Year Event
RFB_001	9.16	9.19	9.25	9.29	9.44
RFB_002	9.17	9.20	9.27	9.31	9.45
RFB_003	9.18	9.21	9.27	9.31	9.46
Gloucester & Sharpness Canal - Right Syphon					
RFB_004	9.24	9.28	9.37	9.42	9.53
RFB_005	9.25	9.30	9.39	9.43	9.54
RFB_006	9.25	9.30	9.39	9.44	9.55
RFB_007	9.26	9.31	9.39	9.44	9.55
Whitminster Weir - Right					
RFB_008	9.26	9.32	9.40	9.45	9.55
Floodplain Cells					
Cell 1	9.17	9.21	9.27	9.31	9.45
Cell 2	9.18	9.21	9.27	9.31	9.45
Cell 3	9.25	9.30	9.39	9.43	9.54
Cell 4	9.25	9.30	9.39	9.43	9.54
Cell 5	9.25	9.30	9.39	9.44	9.54
Cell 6	9.25	9.30	9.39	9.43	9.54
Cell 7	9.25	9.30	9.39	9.43	9.54
Cell 8	9.24	9.30	9.39	9.43	9.54
Cell 9	9.21	9.30	9.40	9.45	9.56
Cell 10	9.14	9.24	9.32	9.37	9.48

Table 28 Structure coefficient sensitivity tests - locations where upstream water level increases exceed 0.10m

Structure Name	Upstream section	Water level increase (m) for decrease in coefficients of:	
		10%	20%
Lower Frome Sub-model			
Wheatenhurst Sluices	RFA_019	0.01	0.14
Millend Mill	RFA_054	0.12	0.21
Stanley Downton Mill race	RFA_090	0.05	0.11
Refuse Tip Weir 1	RFA_119	0.08	0.17
Ebley Mill Weir	RFA_138	0.05	0.11
Fromehall Mill Bypass Sluices	RFA_157	0.06	0.12
Lodgemore Mills Sluices	RFA_166	0.05	0.11
Refuse Tip Weir 3	RFD_081	0.08	0.17
Dudbridge Lock Weir	SCA_005	0.09	0.20
Ruscombe Brook Weir	SCA_007	0.08	0.18
Cainscross Road Weir	SCA_015	0.06	0.12
Upper Frome Sub-model			
Thames and Severn Canal Syphon	RFA_184	0.25	0.53
Arundell Mill Sluices	RFA_187	0.14	0.34
Eagle Mills Culvert	RFA_190	0.14	0.30
Butterow Hill Bridge	RFA_193	0.10	0.22
Bowbridge Estate Bridge	RFA_195	0.10	0.21
Bowbridge Estate Bridge 2	RFA_199	0.06	0.14
Griffin Mill Footbridge 1	RFA_215	0.03	0.20
Griffin Mill Bypass	RFA_218	0.03	0.12
Thrupp Caravan Site Bridge	RFA_242	0.11	0.23
Brimscombe Mill Pond Outlet	RFA_250	0.06	0.12
Chafford Industrial Estate Sluices	RFA_324	0.21	0.30
Thanet House Bridge	RFA_331	0.06	0.12
Ridley Mill Sluices	RFA_344	0.06	0.12
Ashmead Sluices	RFA_357	0.06	0.13
Bakers Bridge	RFA_367	0.14	0.41
Puck Mill Culvert	RFA_379	0.12	0.26

Table 28 Continued

Structure Name	Upstream section	Water level increase (m) for decrease in coefficients of:	
		10%	20%
Griffin Mill Weir 2	RFO_012	0.03	0.12
Butterow Hill Canal Bridge	SCB_007	0.08	0.33
Puck Mill Upper Lock Weir	SCC_060	0.07	0.15
Whitehall Lower lock Weir	SCC_062	0.13	0.26
Nailsworth Stream Sub-model			
Erinoid Bridge	NSA_016	0.15	0.33
Car Park Bridge	NSA_019	0.15	0.33
Cotswold House Bridge	NSA_023	0.08	0.19
New Tynings Footbridge	NSA_025	0.06	0.15
Rooksmoor Mill Culvert - Right	NSA_038	0.39	0.84
Rooksmoor Mill Weir	NSA_039	0.38	0.83
Selsley Road Bridge	NSA_045	0.37	0.82
Selsley Road Weir	NSA_046	0.36	0.80
Pauls Rise Bridge	NSA_048	0.31	0.73
Railway Bridge	NSA_052	0.29	0.63
The Forge Weir	NSA_054	0.26	0.57
Birds Crossing	NSA_056	0.21	0.28
Station Road Works	NSA_062	0.22	0.40
Station Road Bridge	NSA_063	0.17	0.35
South Woodchester Works Bridge	NSA_065	0.14	0.30
Frogmarsh Lane Bridge	NSA_076	0.07	0.11
Bath Road Bridge	NSA_078	0.07	0.12
Merretts Mills Bridge	NSA_083	0.08	0.14
Merretts Mills Culvert	NSA_086	0.10	0.17
Inchbrook Bridge	NSA_089	0.09	0.15
Critchleys (New) Culvert	NSA_096	0.06	0.15
Critchleys Bridge 2	NSA_098	0.11	0.23
Dunkirk Mills Culvert	NSA_101	0.09	0.19
Garage Culvert	NSA_119	0.12	0.25
Egypt Mill Weir & Wheel	NSA_122	0.12	0.25

Table 28 Continued

Structure Name	Upstream section	Water level increase (m) for decrease in coefficients of:	
		10%	20%
Rooksmoor Mill Culvert - Left	NSB_002	0.38	0.83
Tennis Court Bridge	NSC_012	0.26	0.06
Dunkirk Mills Bridge 1	NSC_015	0.26	0.12
Dunkirk Mills Side Sluices	NSC_016	0.09	0.19

Figures

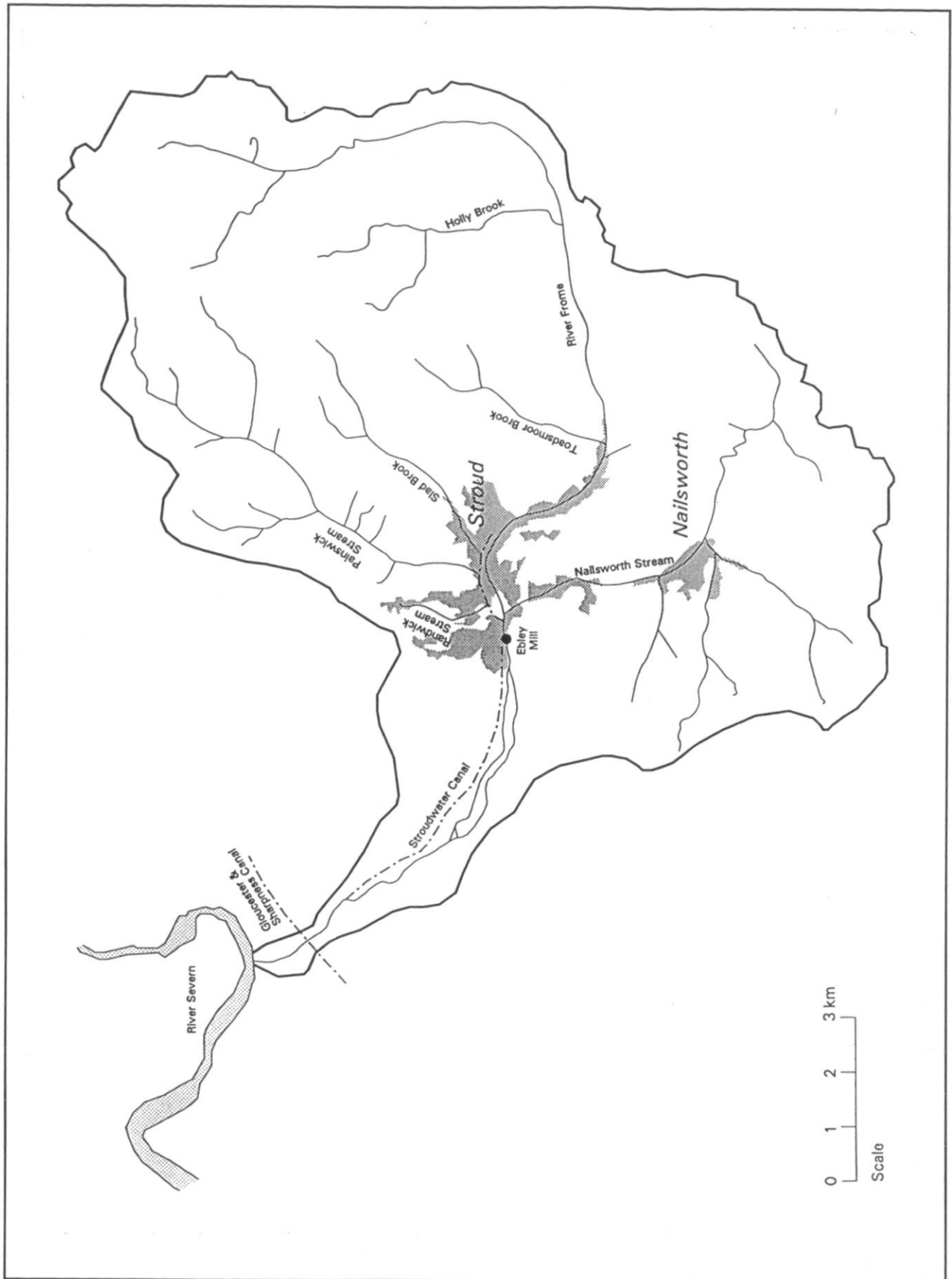


Figure 1 Frome catchment and river system

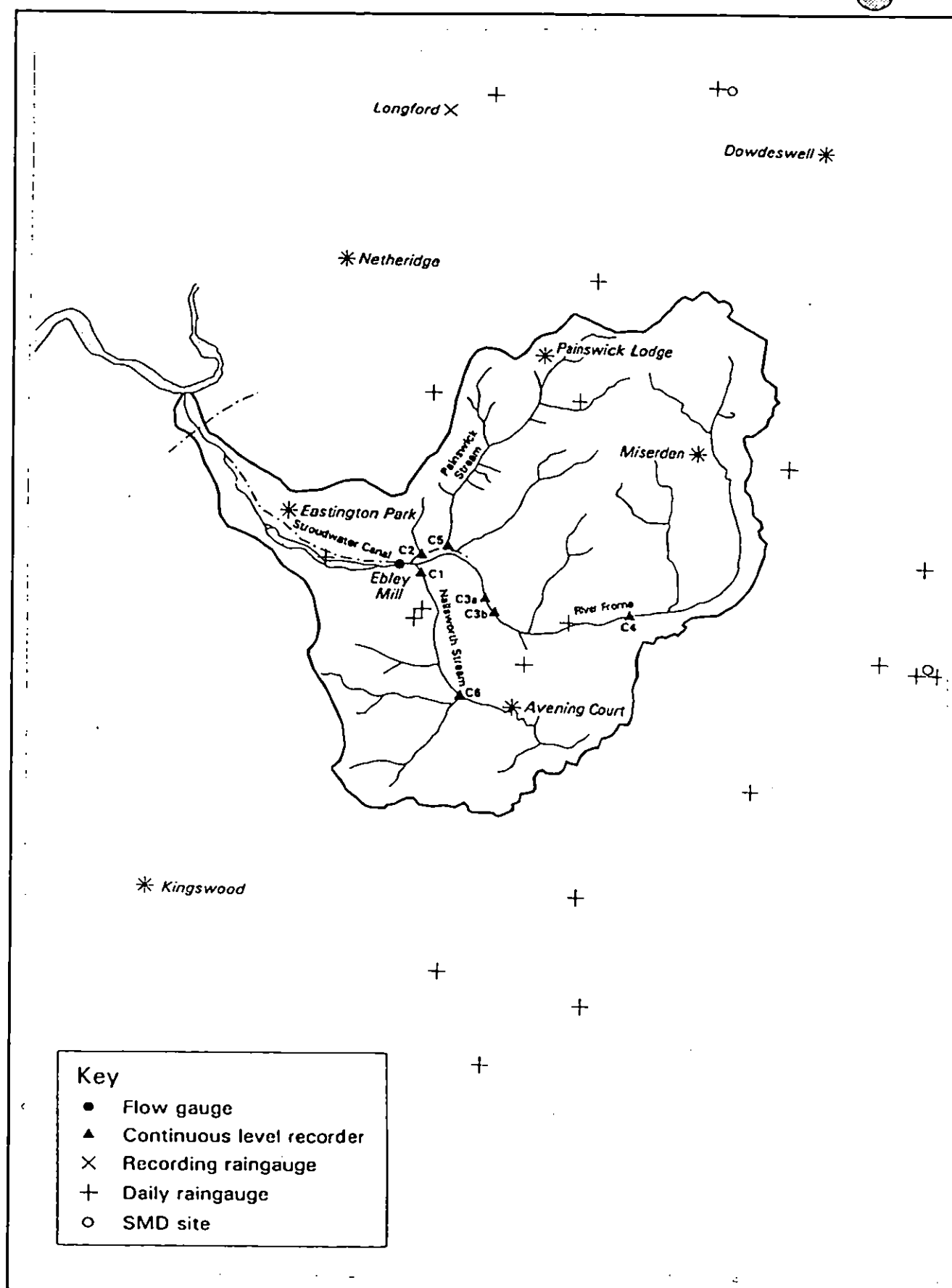


Figure 2 Frome basin showing locations of flow gauging stations and meteorological sites

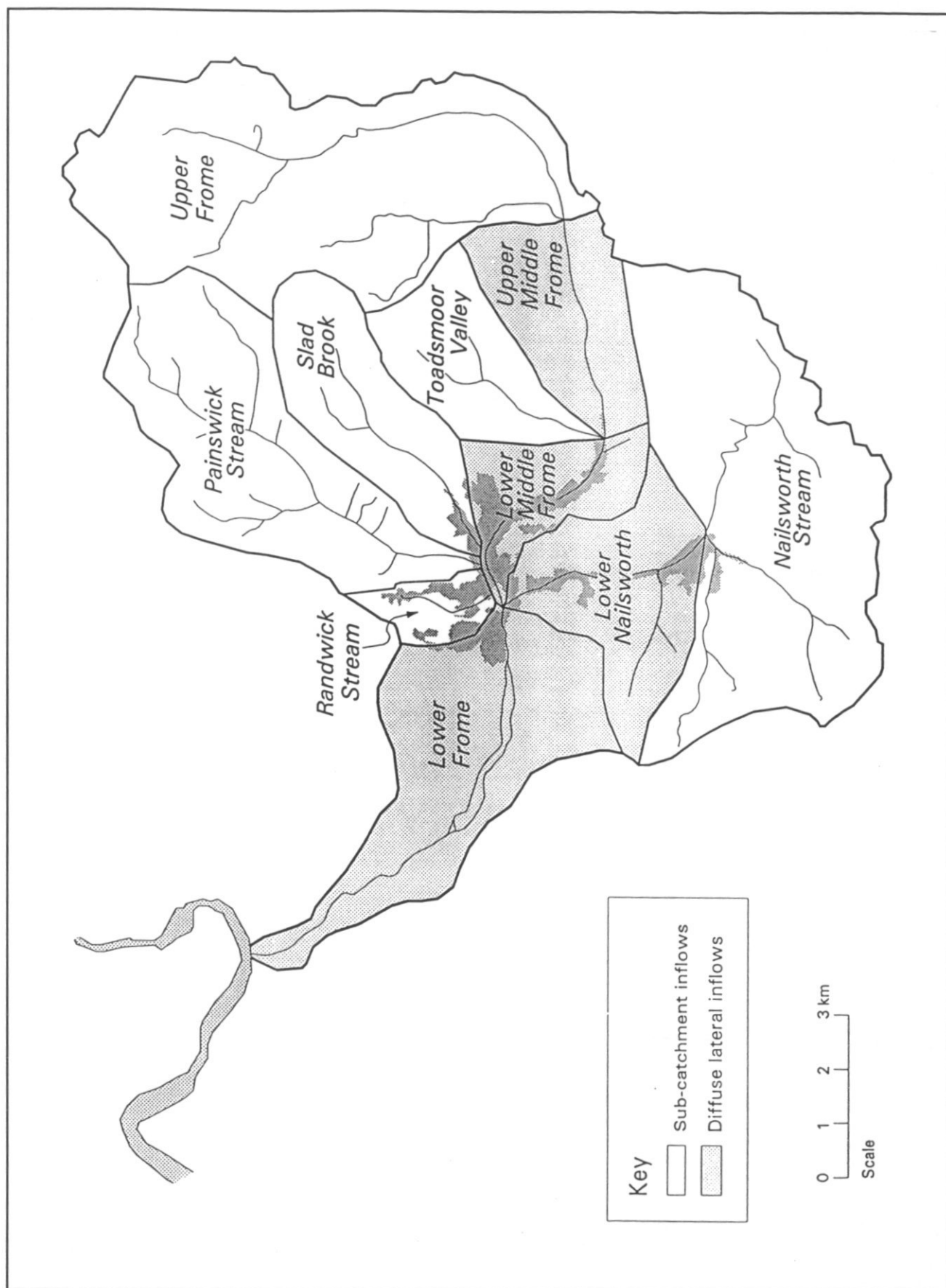
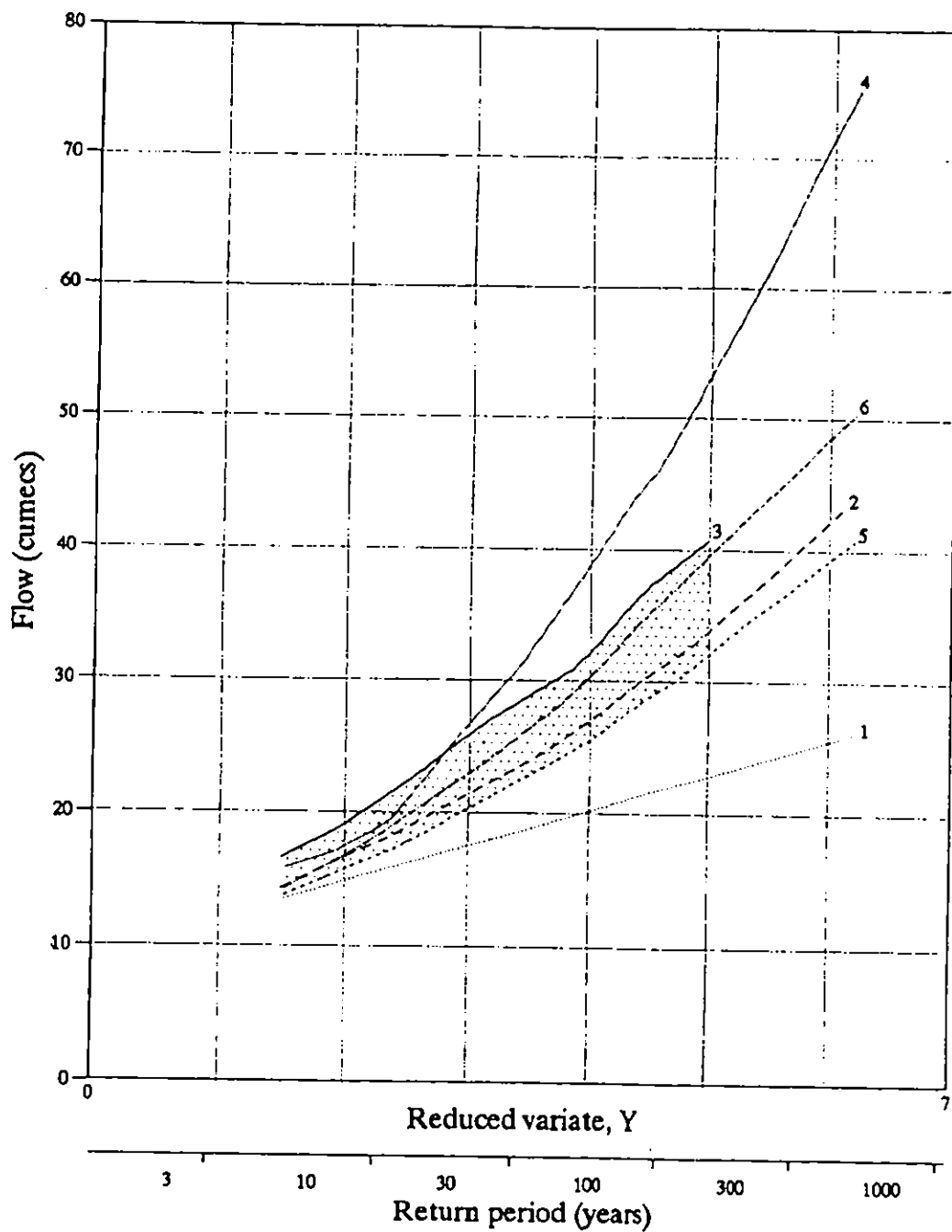


Figure 3 Frome basin showing sub-catchment boundaries



Key

- 1 Observed flood frequency curve
- 2 - - - - Flood frequency curve from 26 years' data
- 3 - - - - Flood frequency curve from routed flows
- 4 - - - - FSR rainfall-runoff with data
- 5 Observed MAF and region 4 growth curve
- 6 - - - - Observed MAF and region 6/7 growth curve
- Band indicating most likely position of true flood frequency curve

Figure 4 Comparison of flood frequency plots for Ebbley Mill

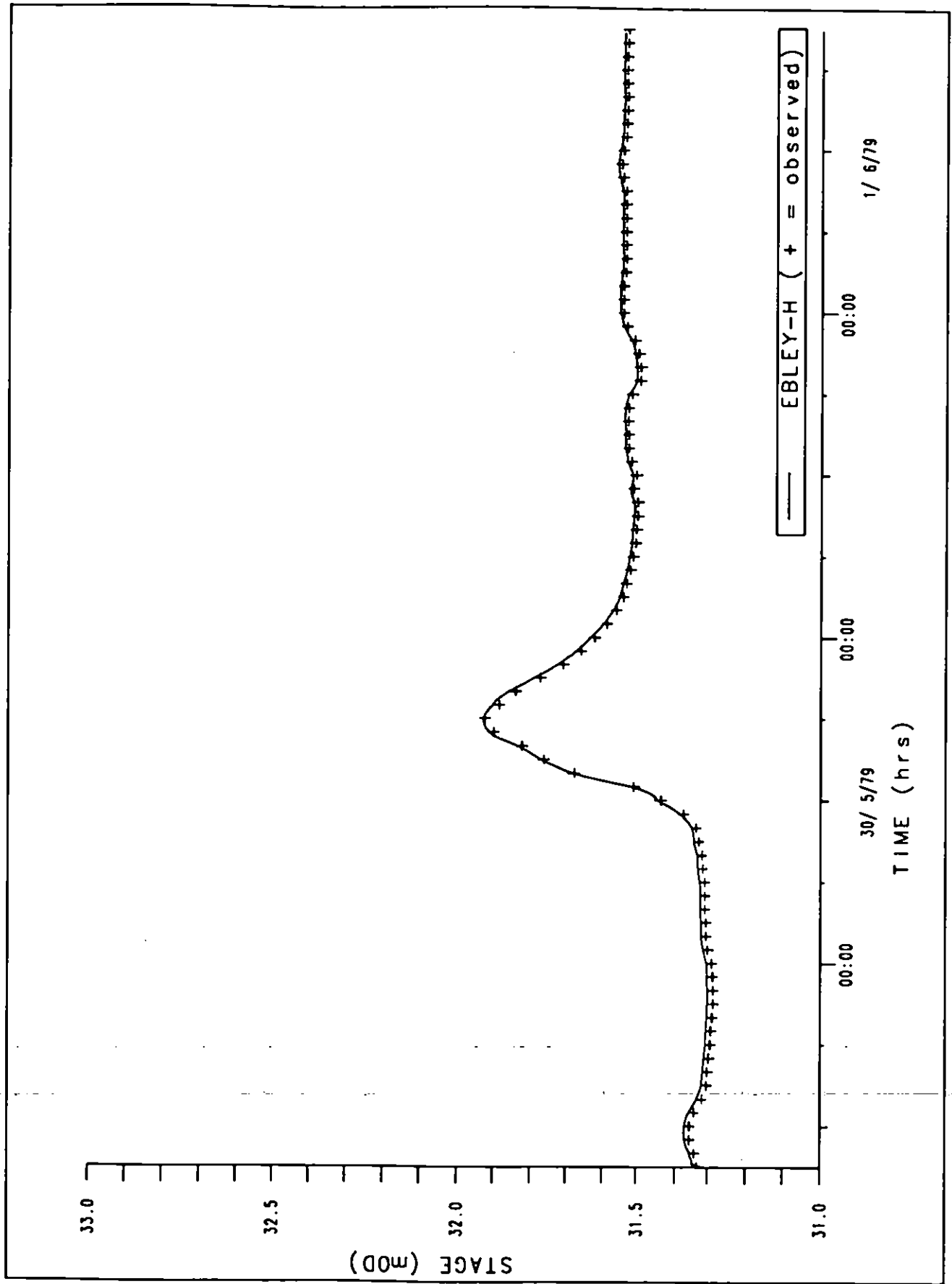


Figure 5 Ebley Mill gauging station calibration results - May 1979 event

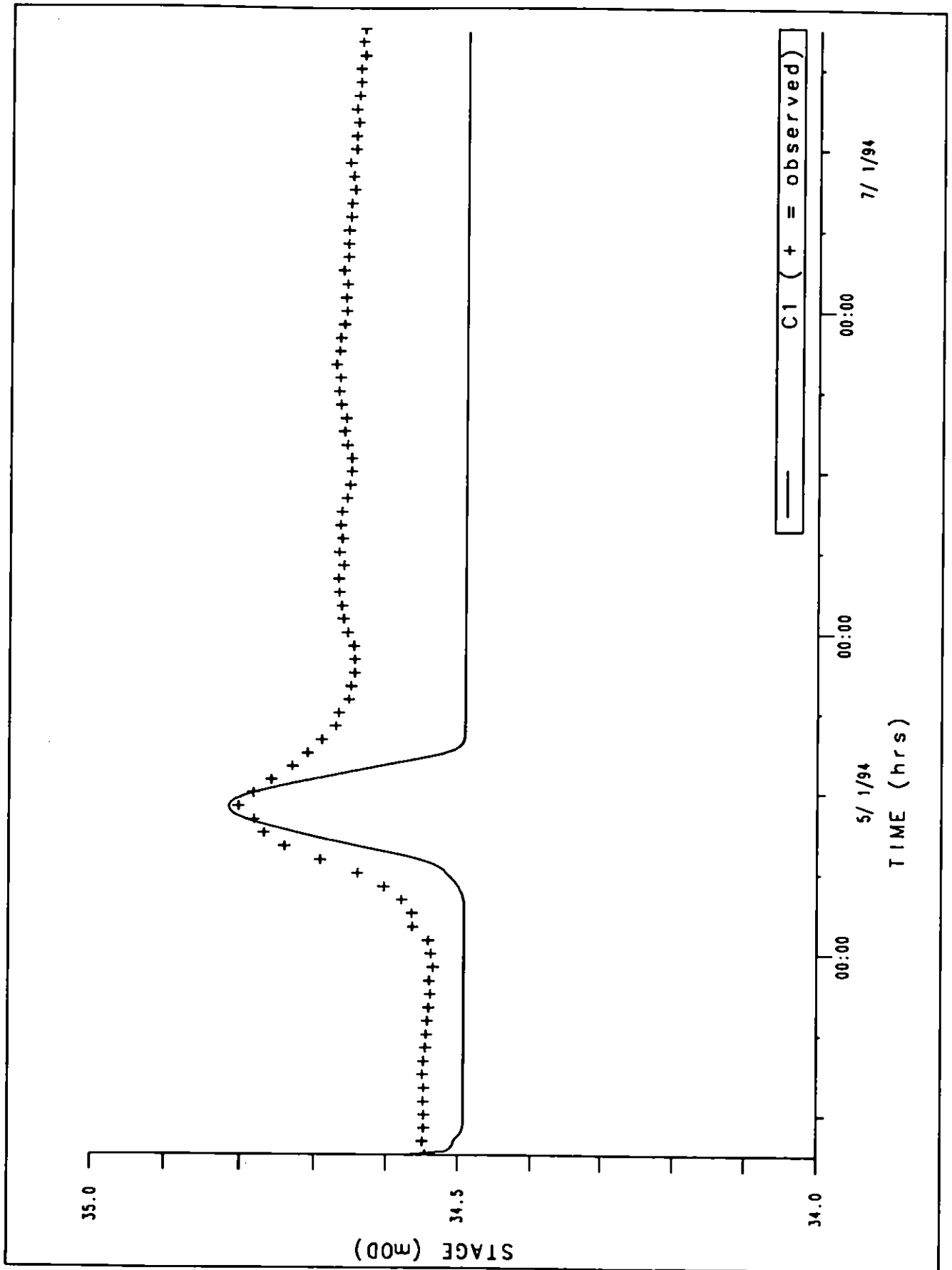


Figure 6 January 1994 calibration results - C1 (Persimon Homes)

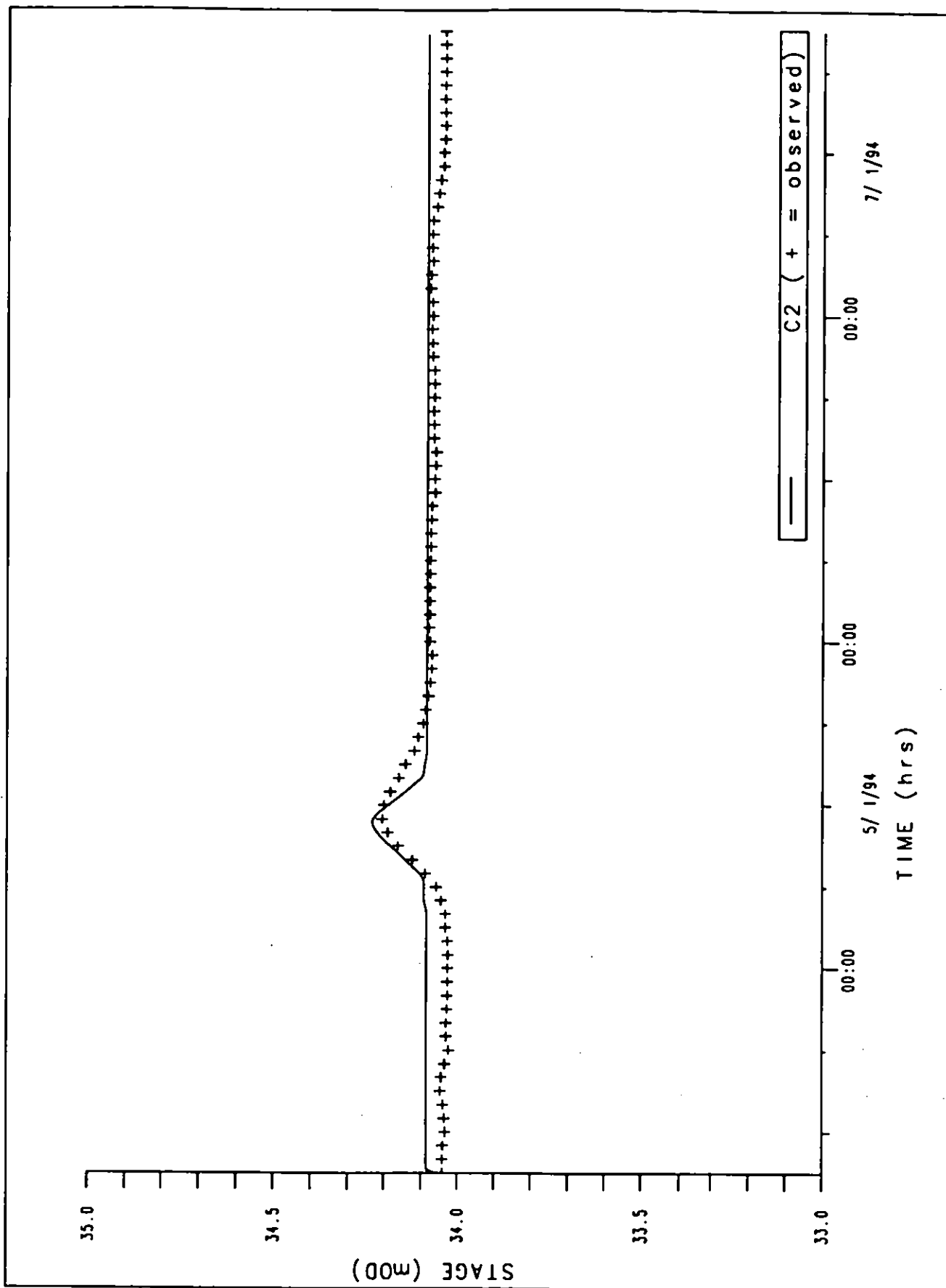


Figure 7 January 1994 calibration results - C2 (Dudbridge Weir)

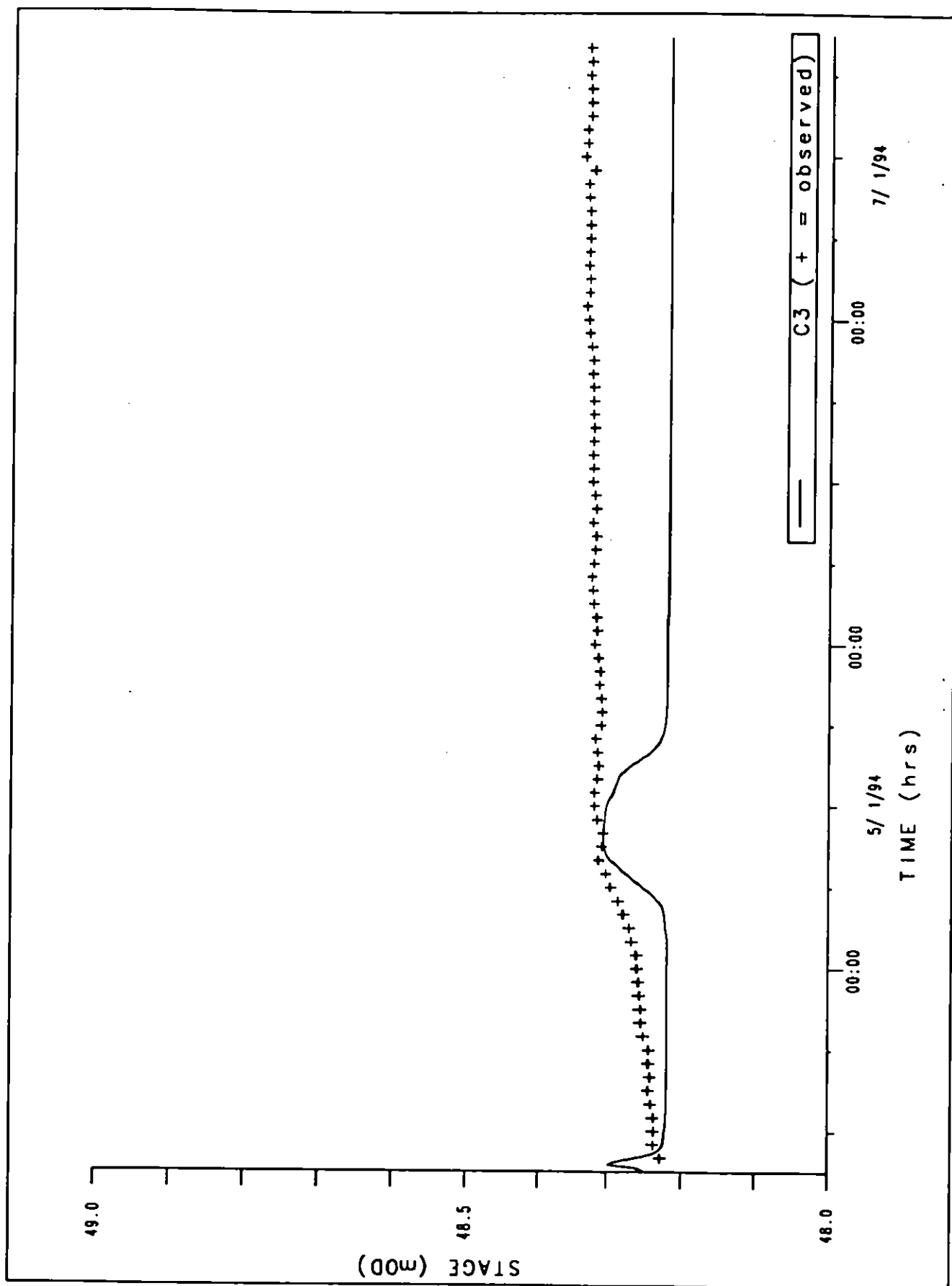


Figure 8 January 1994 calibration results - C3 (Thrupp)

Graph showing Stage (m00) versus Time (hrs) for C4. The y-axis ranges from 79.0 to 80.0 m00. The x-axis shows time from 00:00 to 00:00 on 5/1/94 and 7/1/94. A solid line represents the model output, and '+' symbols represent observed data points. The stage rises from approximately 79.4 m00 to a peak of about 79.7 m00 around 00:00 on 5/1/94, then falls back to 79.4 m00 by 00:00 on 7/1/94.

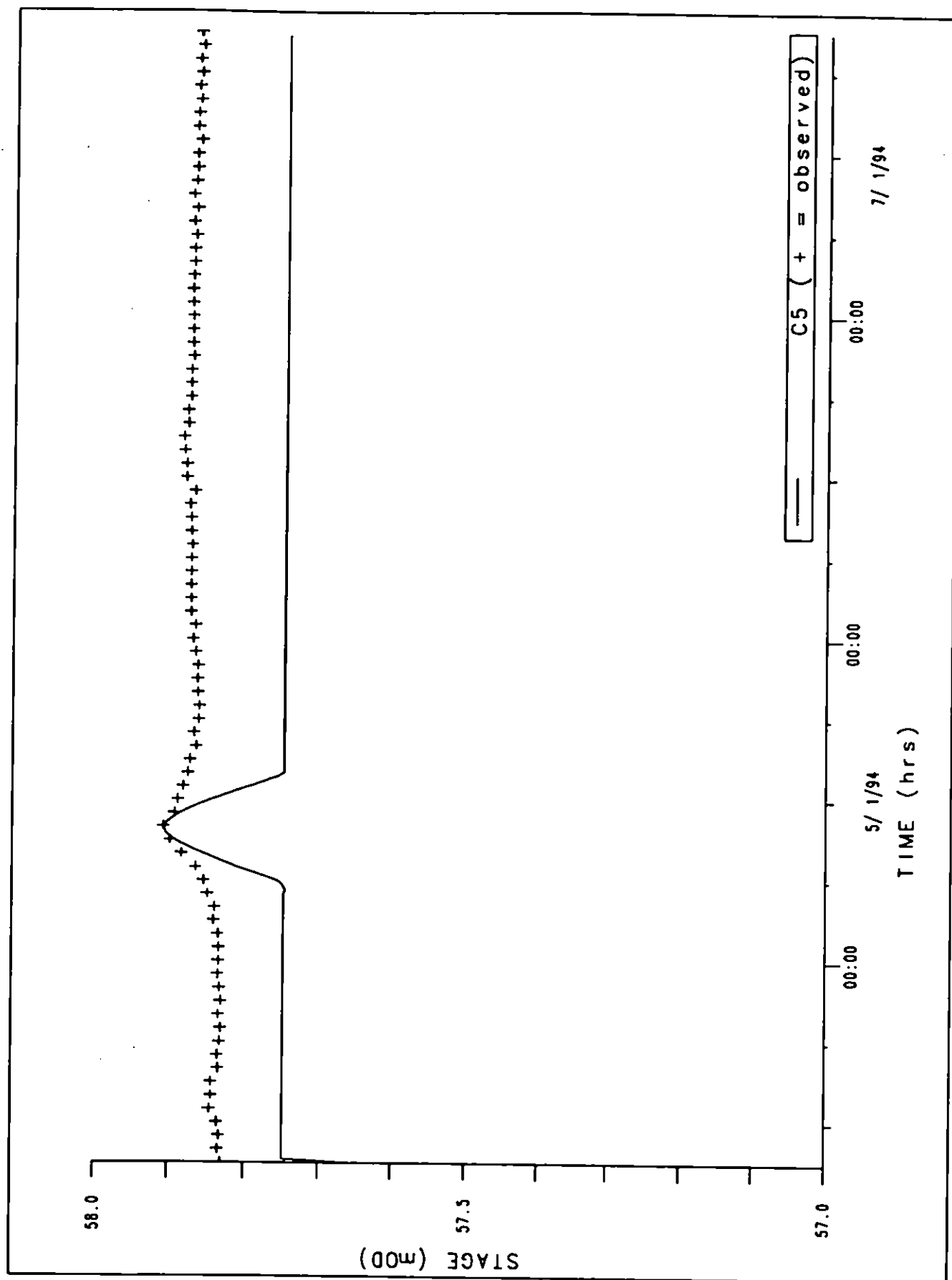


Figure 10 January 1994 calibration results - C5 (Egypt Mill)

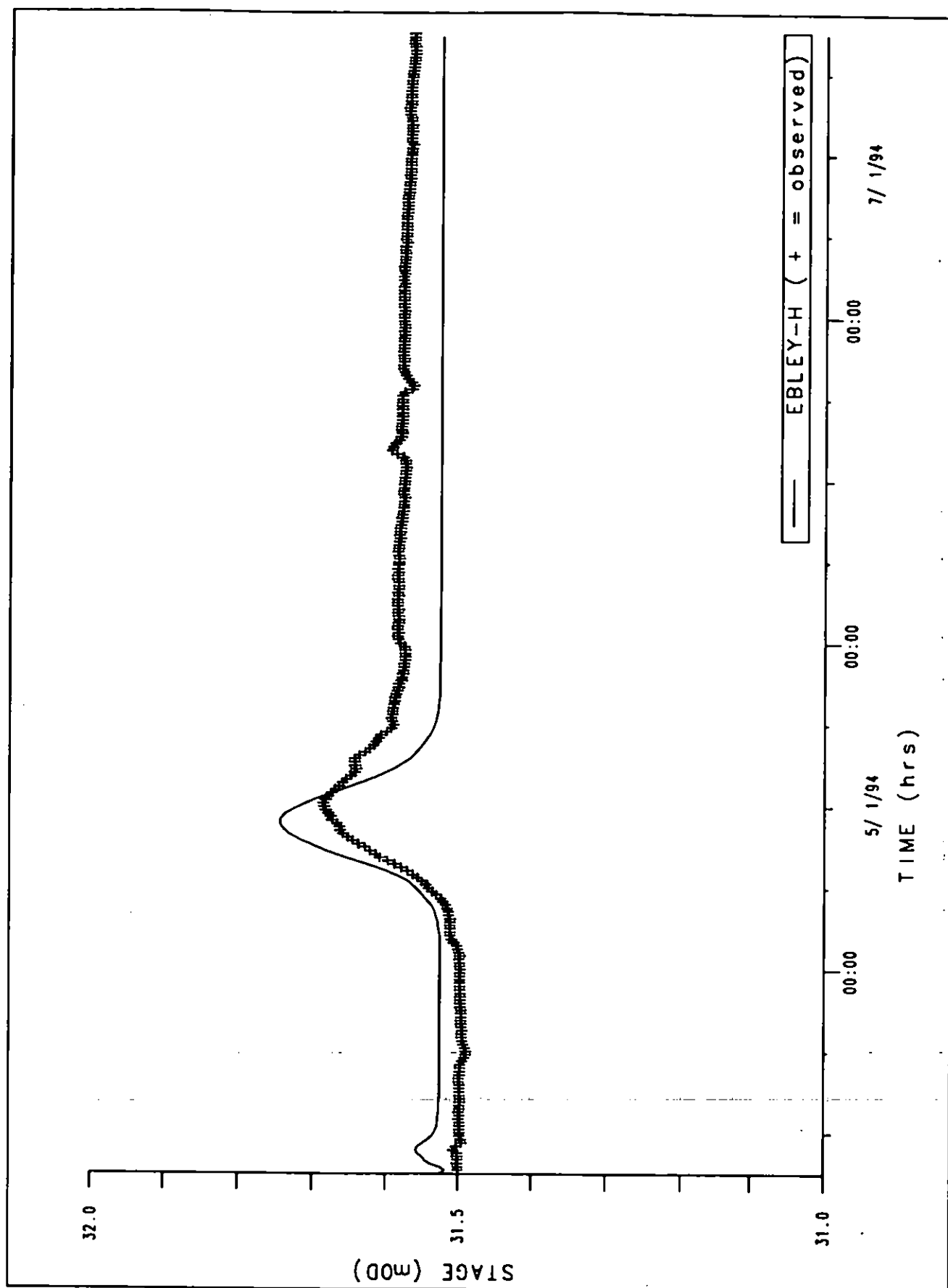


Figure 11 January 1994 calibration results - stage at Ebley Mill

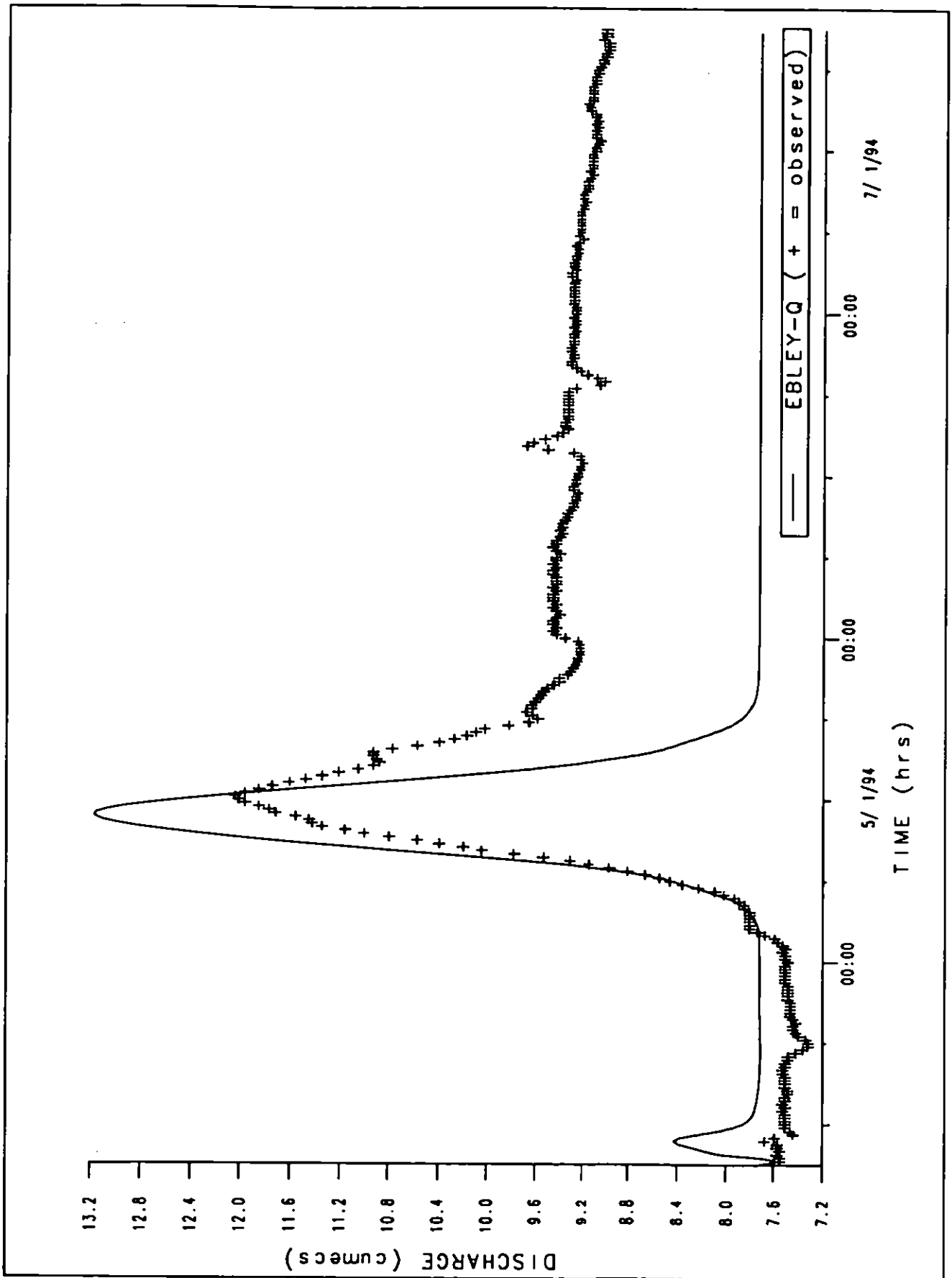


Figure 12 January 1994 calibration results - discharge at Ebley Mill

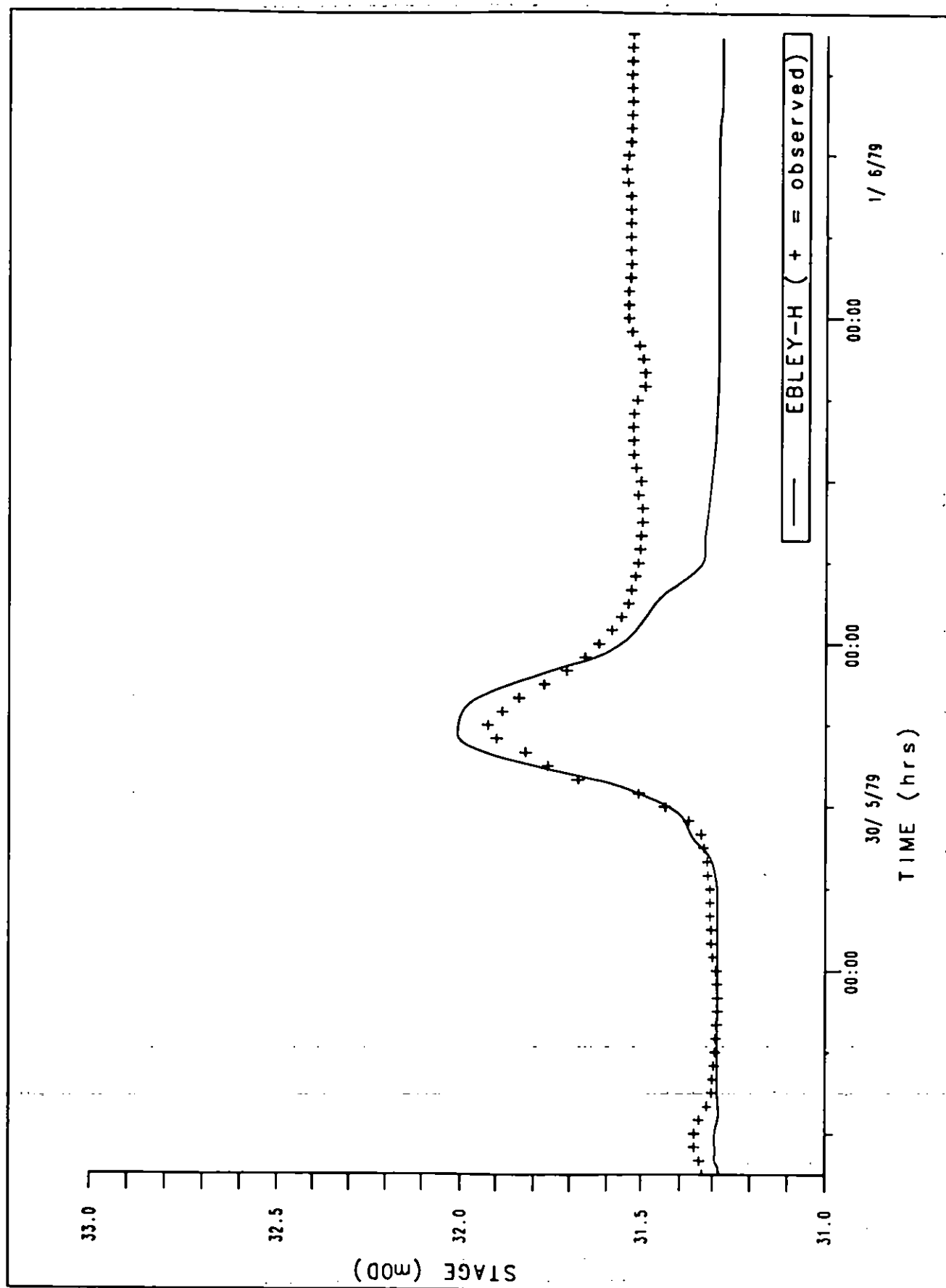


Figure 13 May 1979 calibration results - stage at Ebley Mill

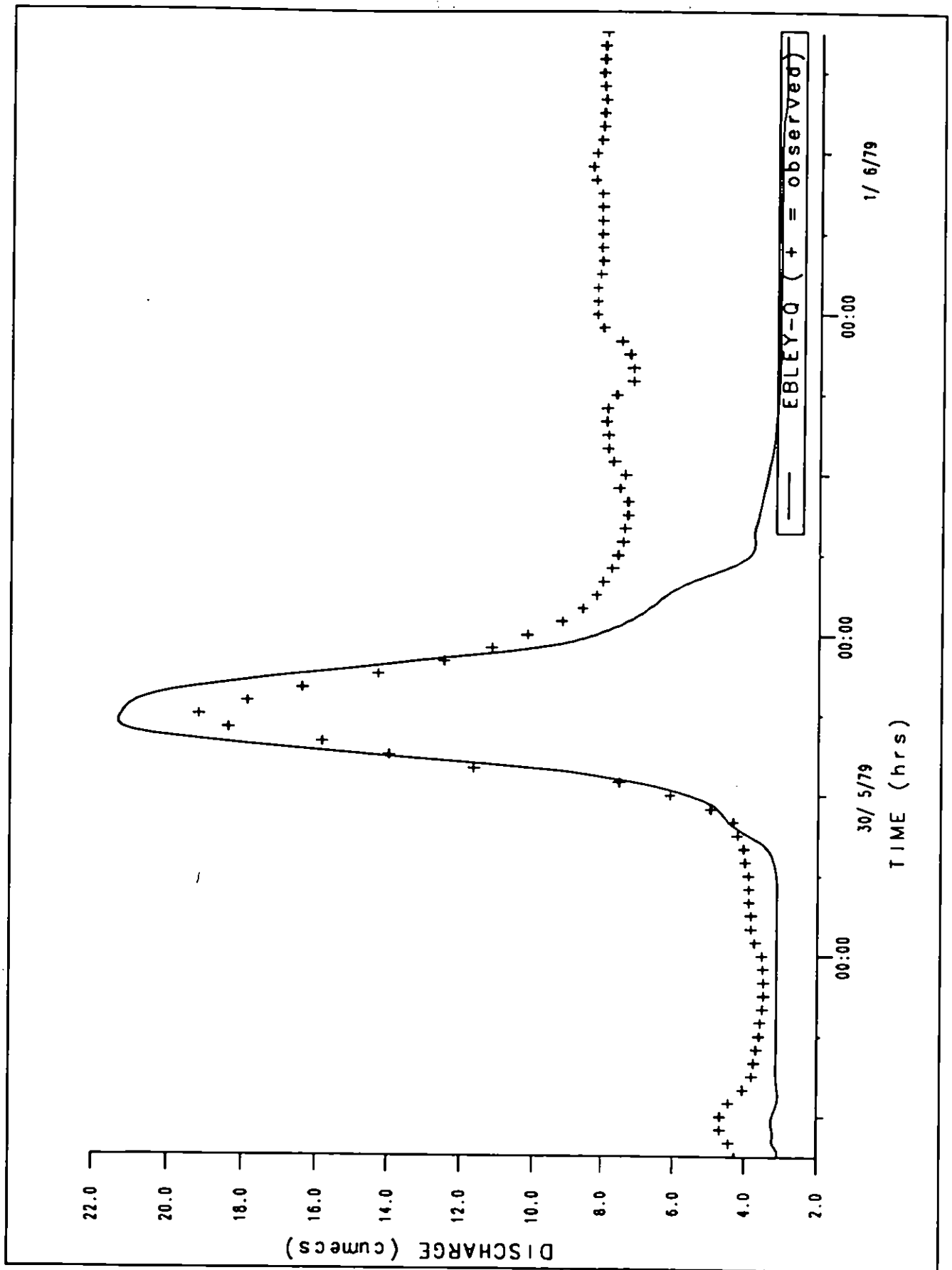


Figure 14 May 1979 calibration results - discharge at Ebley Mill.

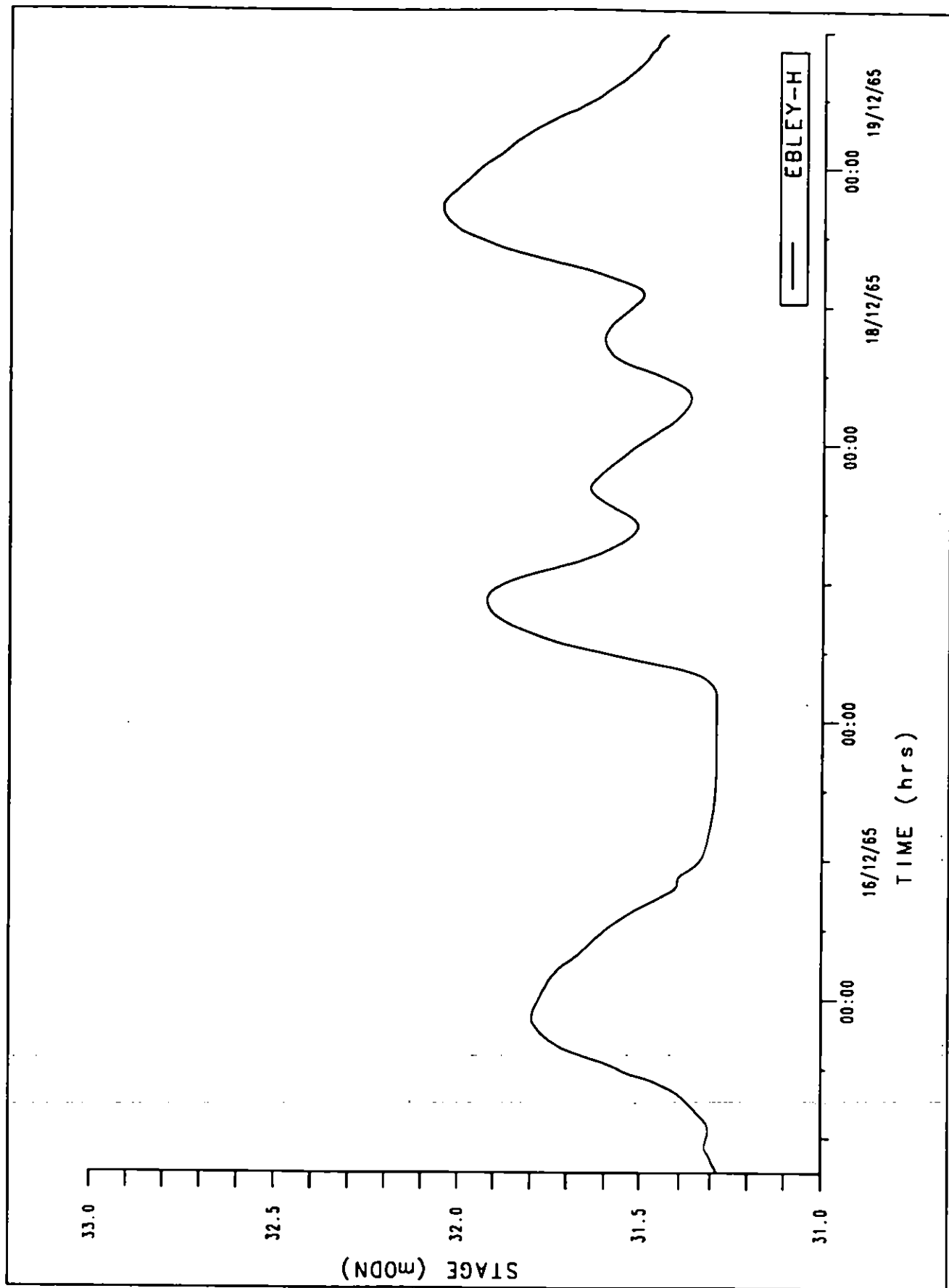


Figure 15 December 1965 calibration results - stage at Ebley Mill

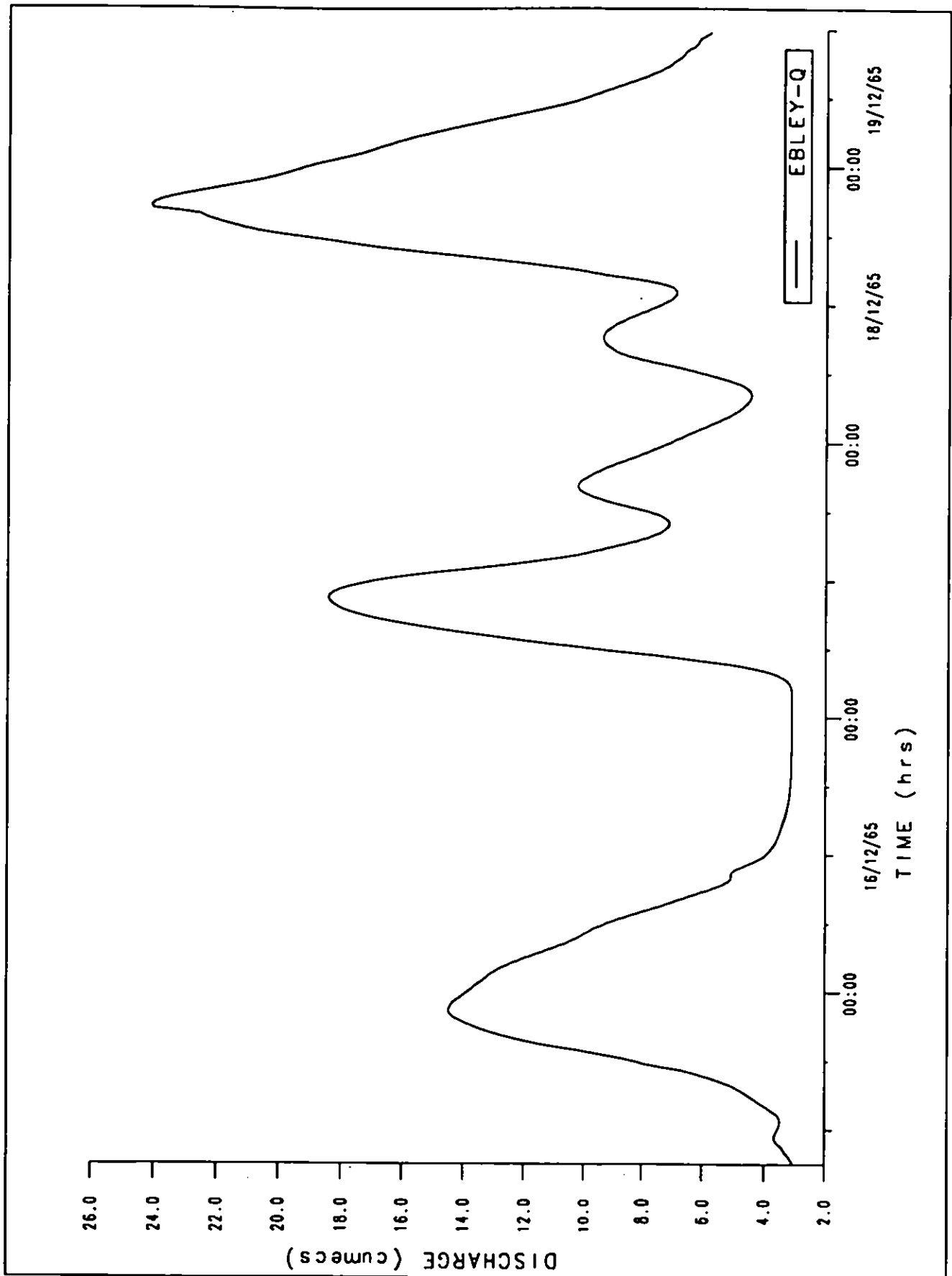


Figure 16 December 1965 calibration results - discharge at Ebley Mill

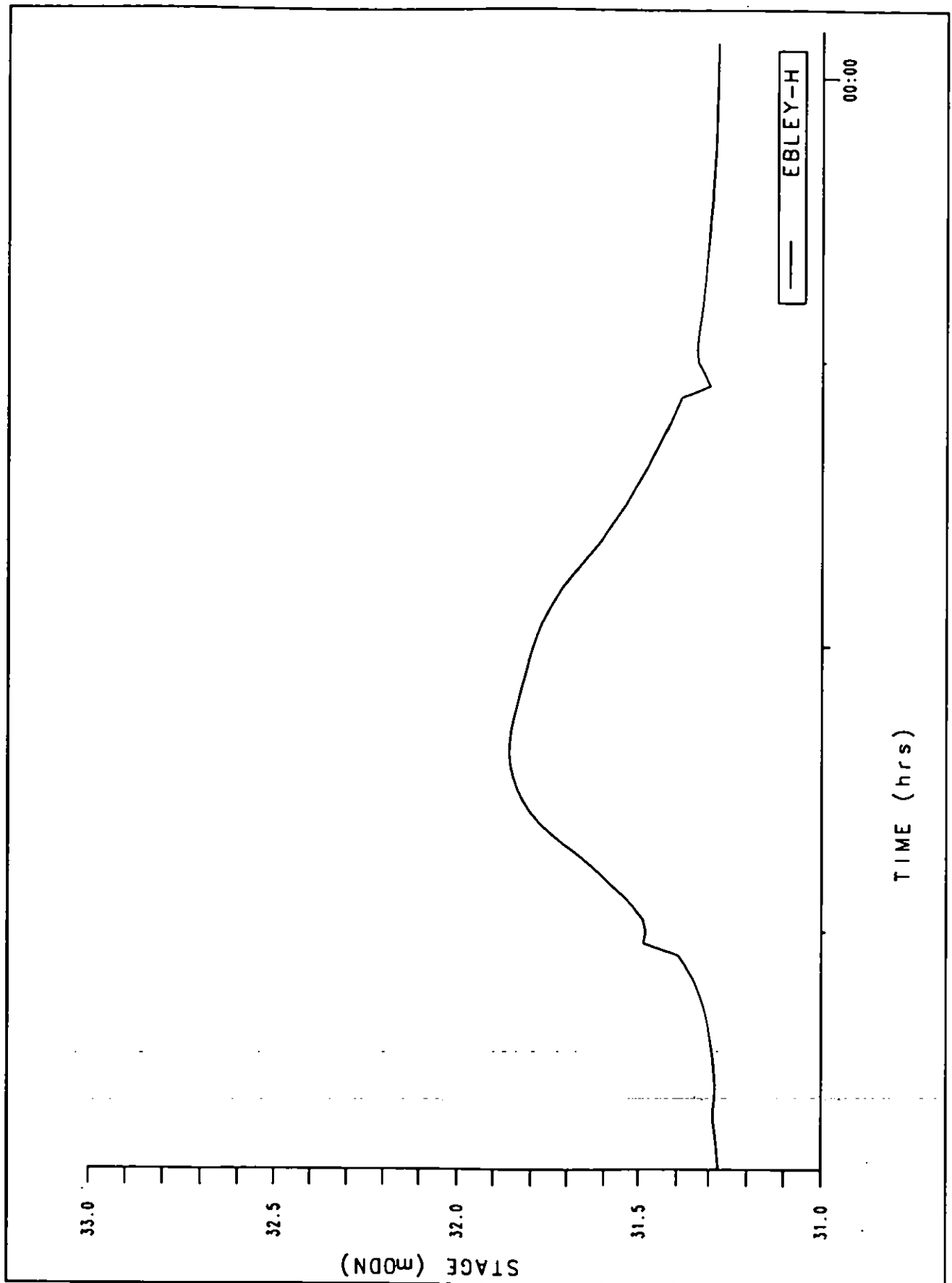


Figure 17 5 year return period flood event - stage at Ebley Mill

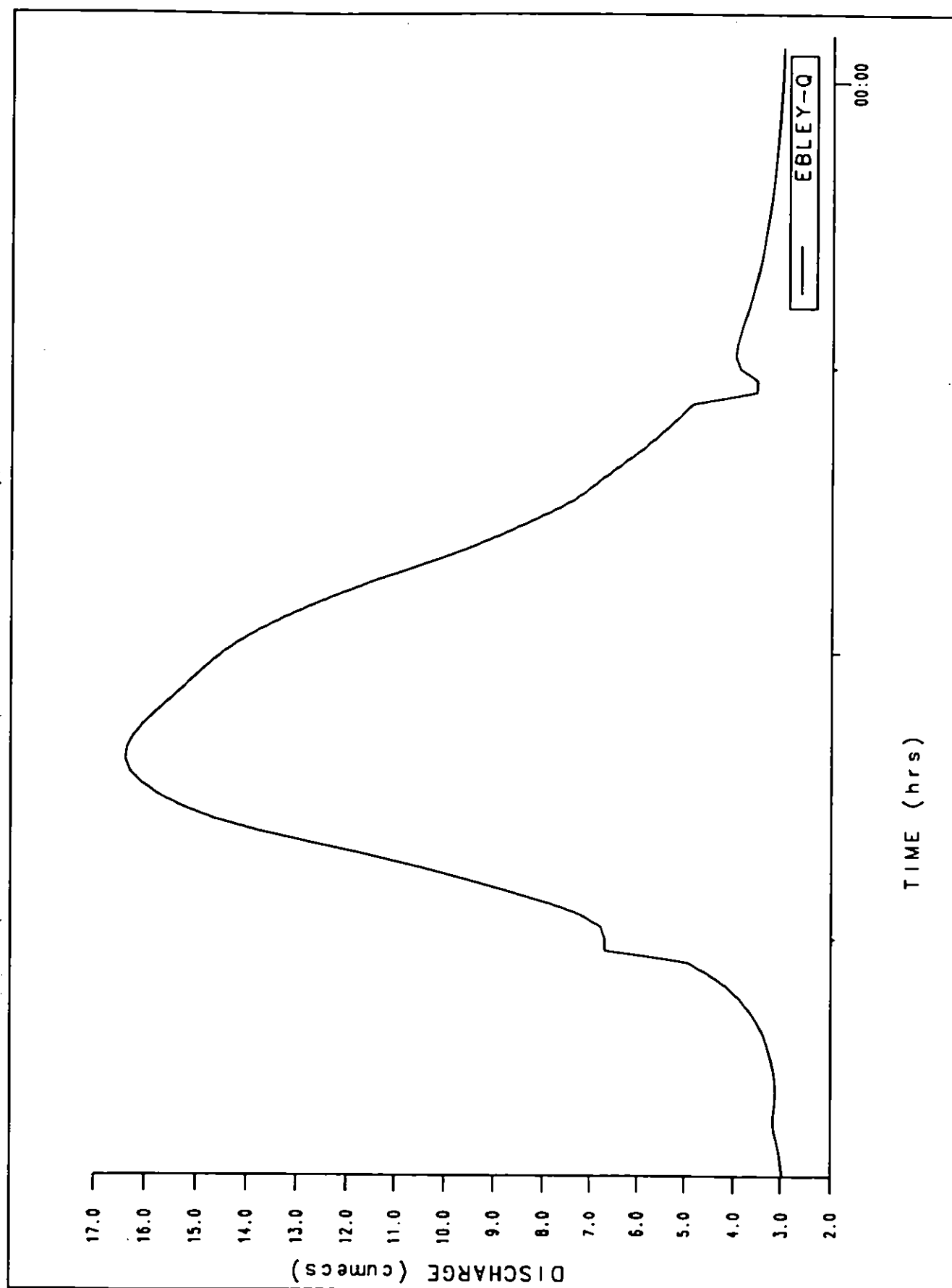


Figure 18 5 year return period flood event - discharge at Ebley Mill

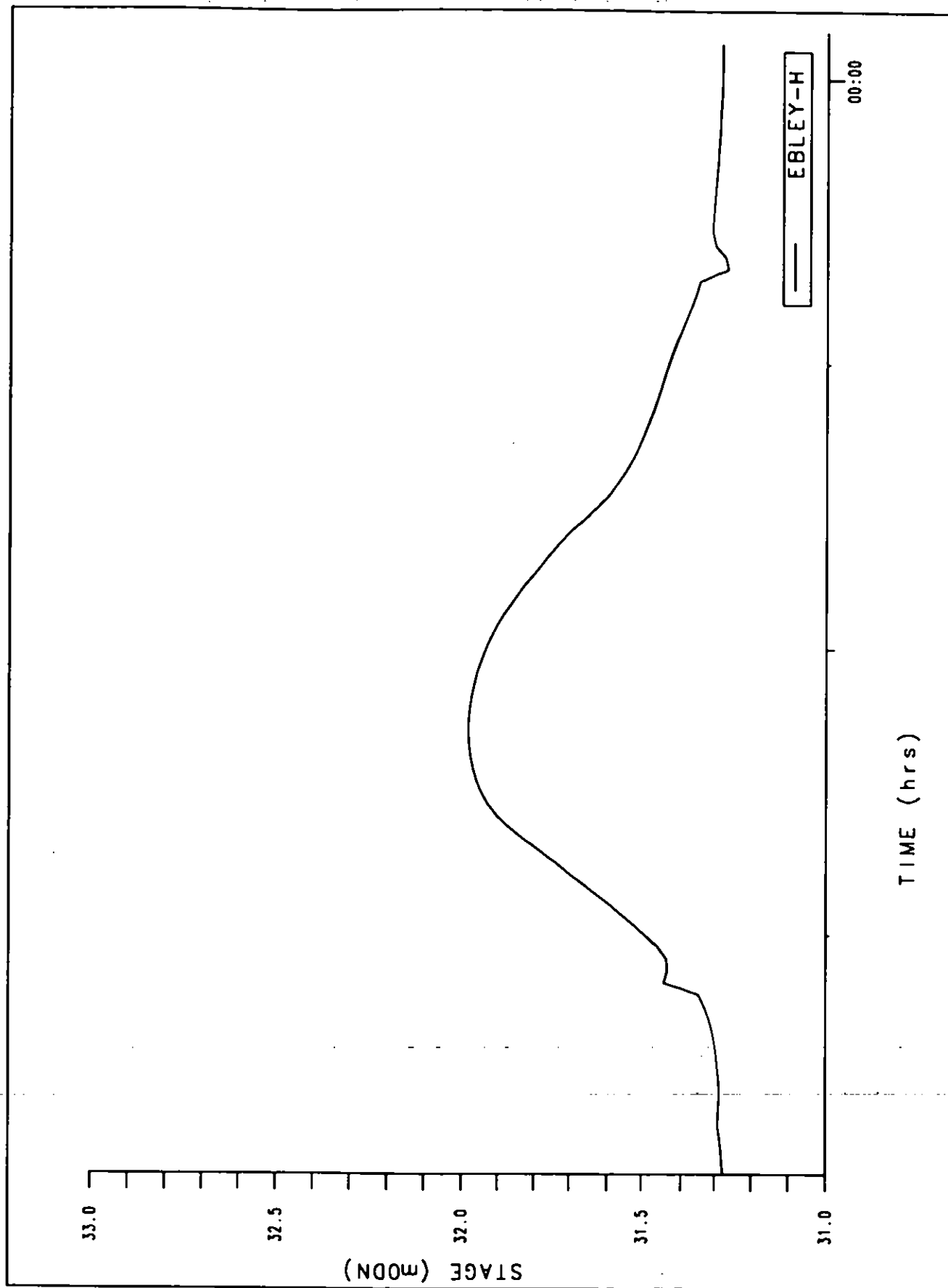


Figure 19 10 year return period flood event - stage at Ebley Mill

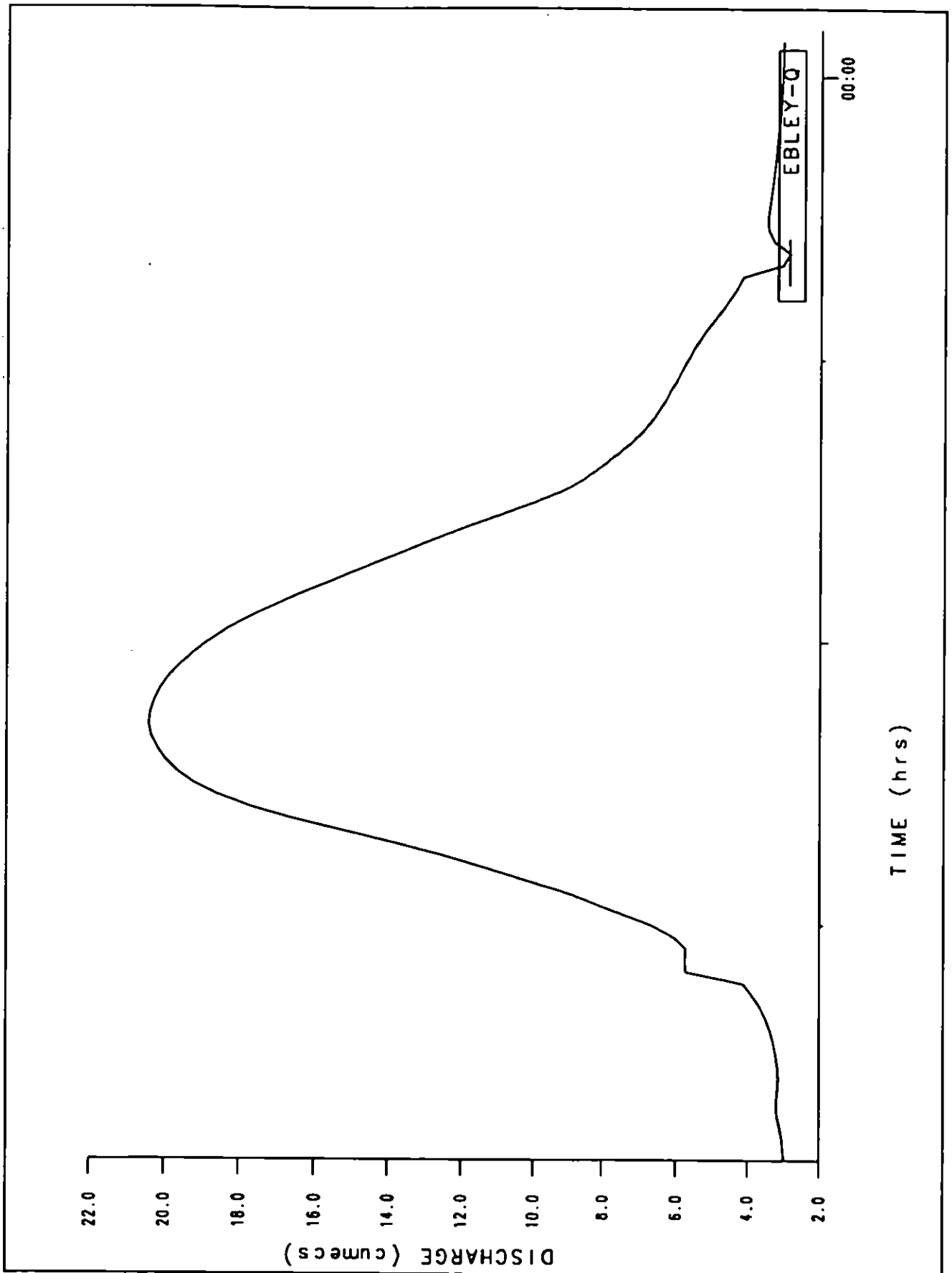


Figure 20 10 year return period flood event - discharge at Ebley Mill

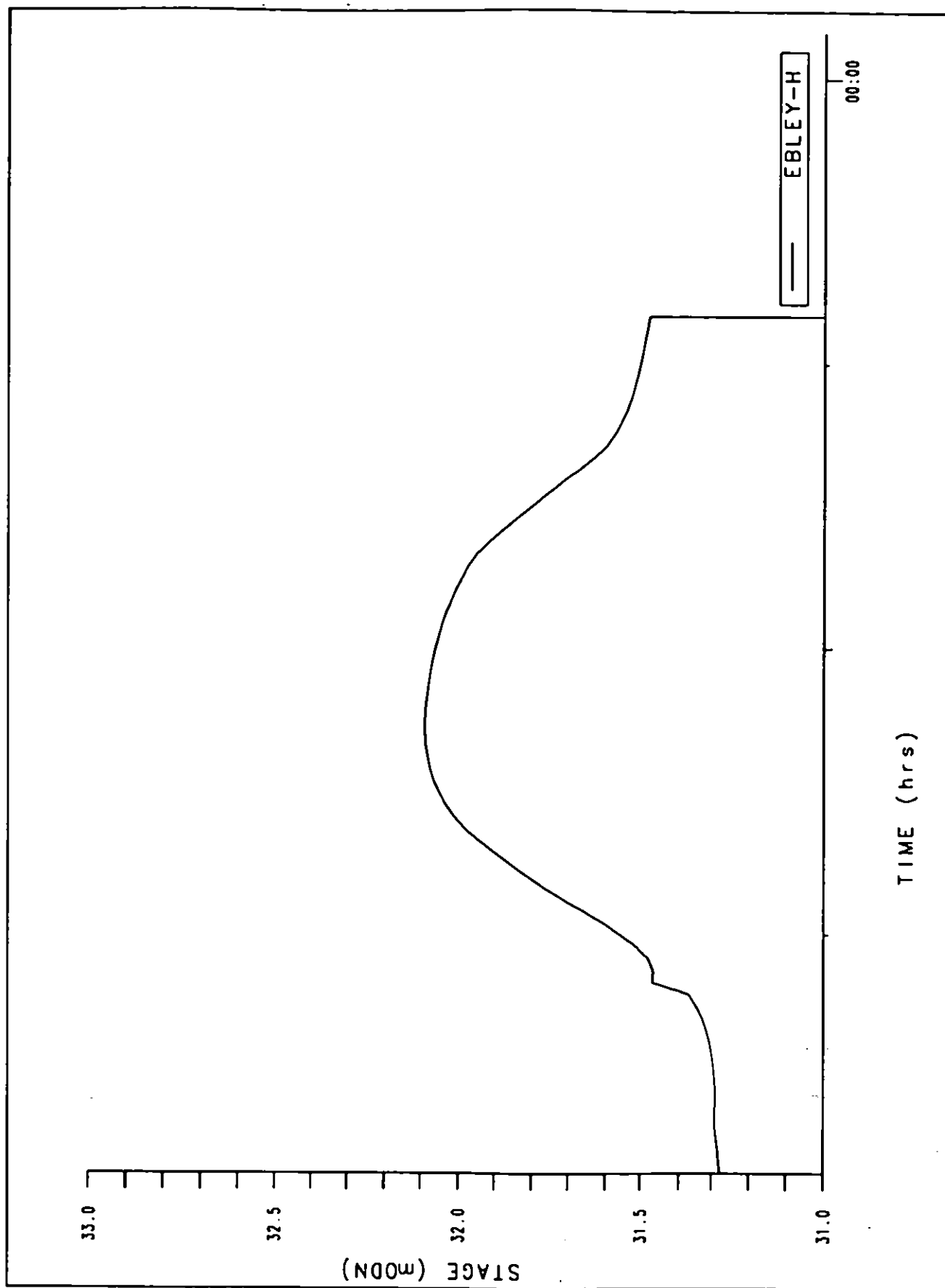


Figure 21 25 year return period flood event - stage at Ebley Mill

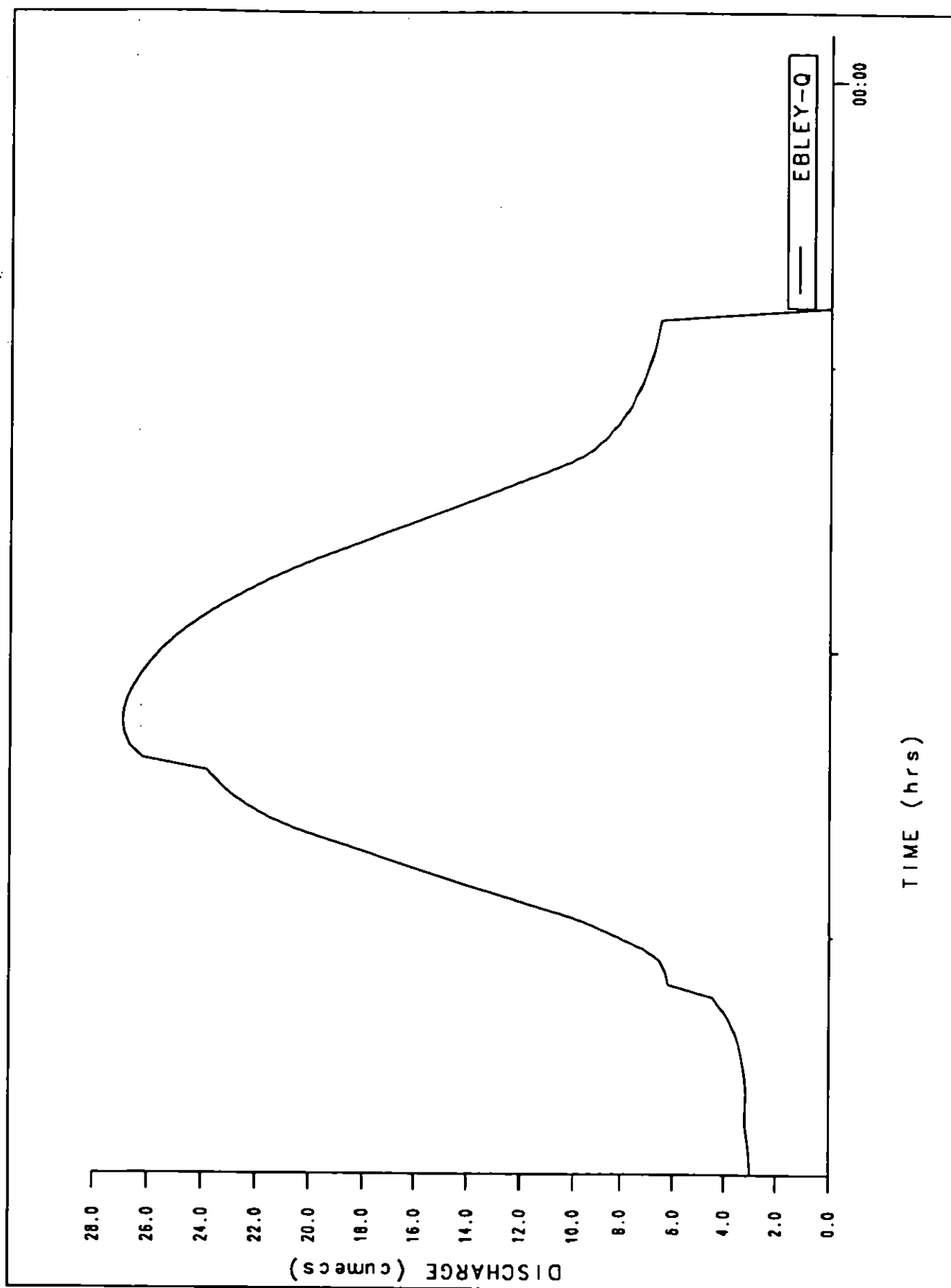


Figure 22 25 year return period flood event - discharge at Ebley Mill

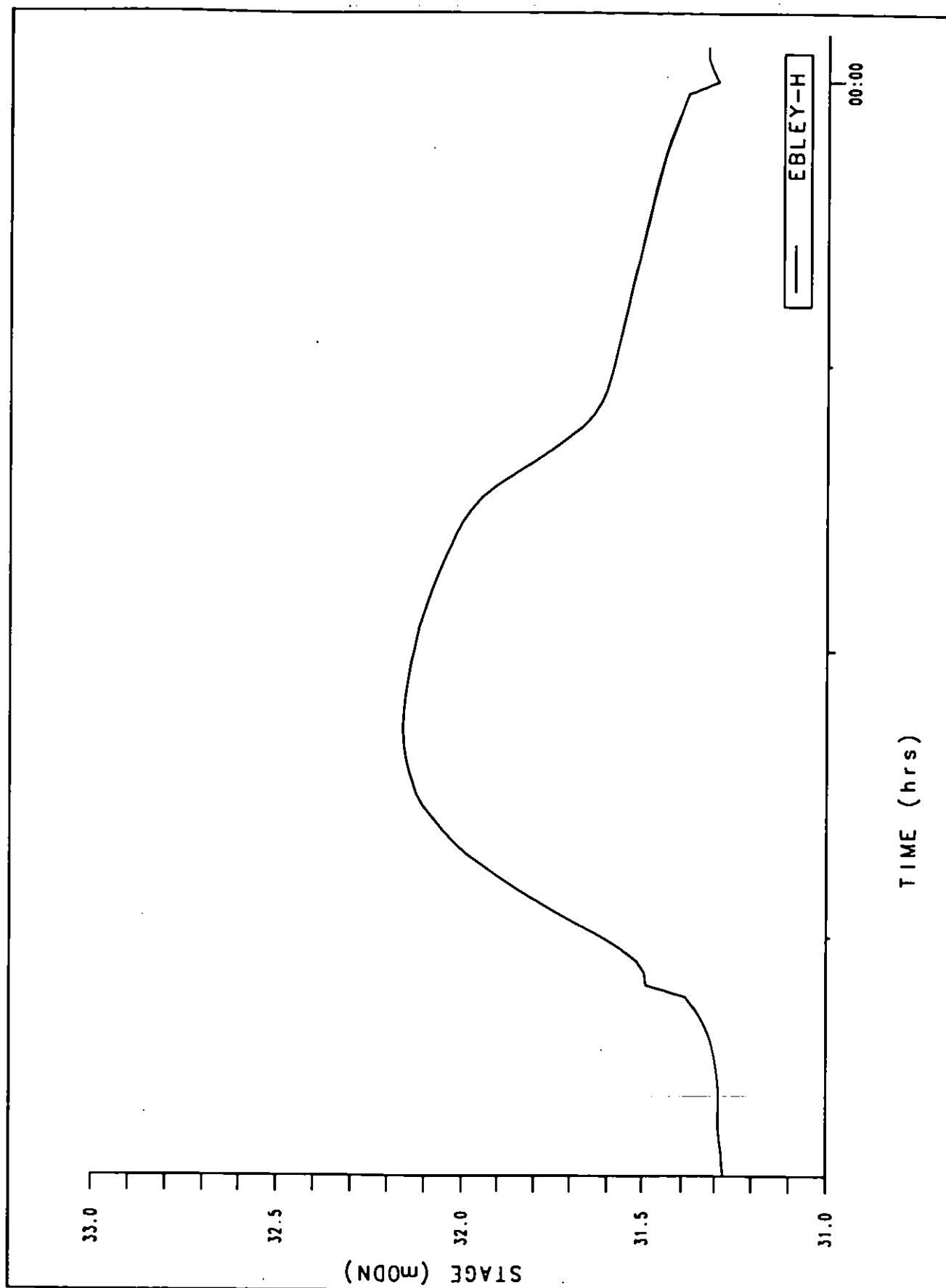


Figure 23 50 year return period flood event - stage at Ebley Mill

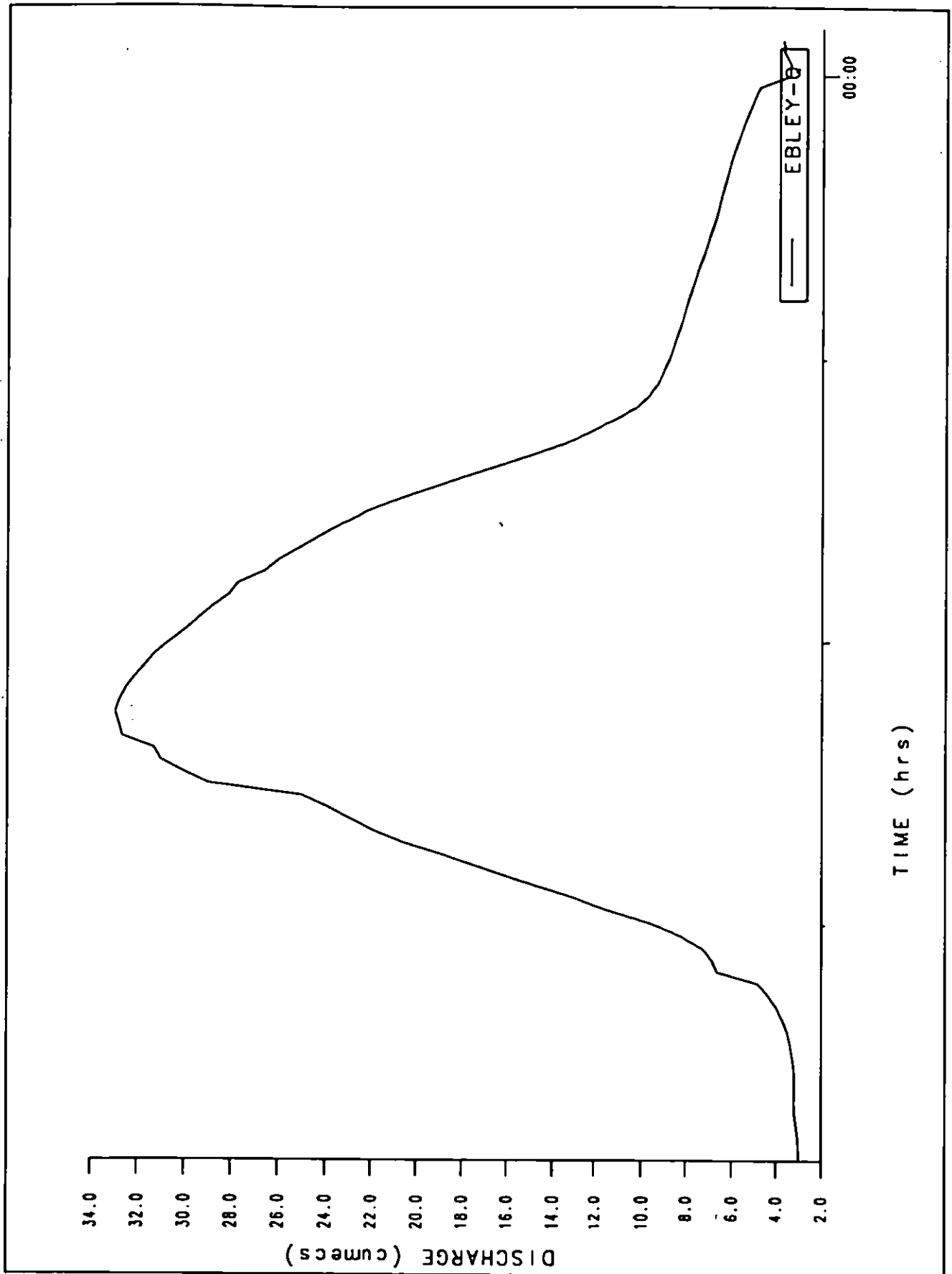


Figure 24 50 year return period flood event - discharge at Ebley Mill

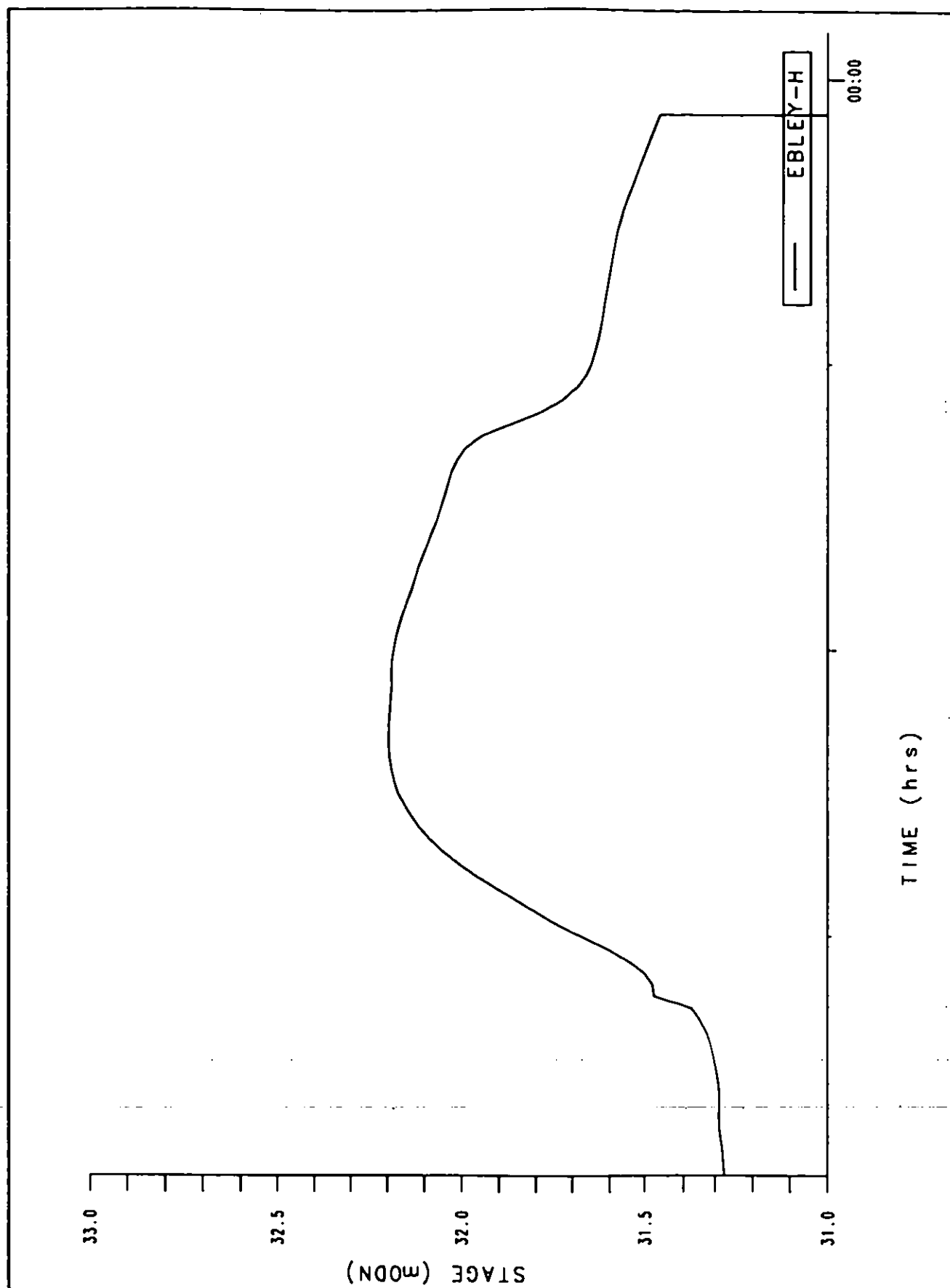


Figure 25 100 year return period flood event - stage at Ebley Mill

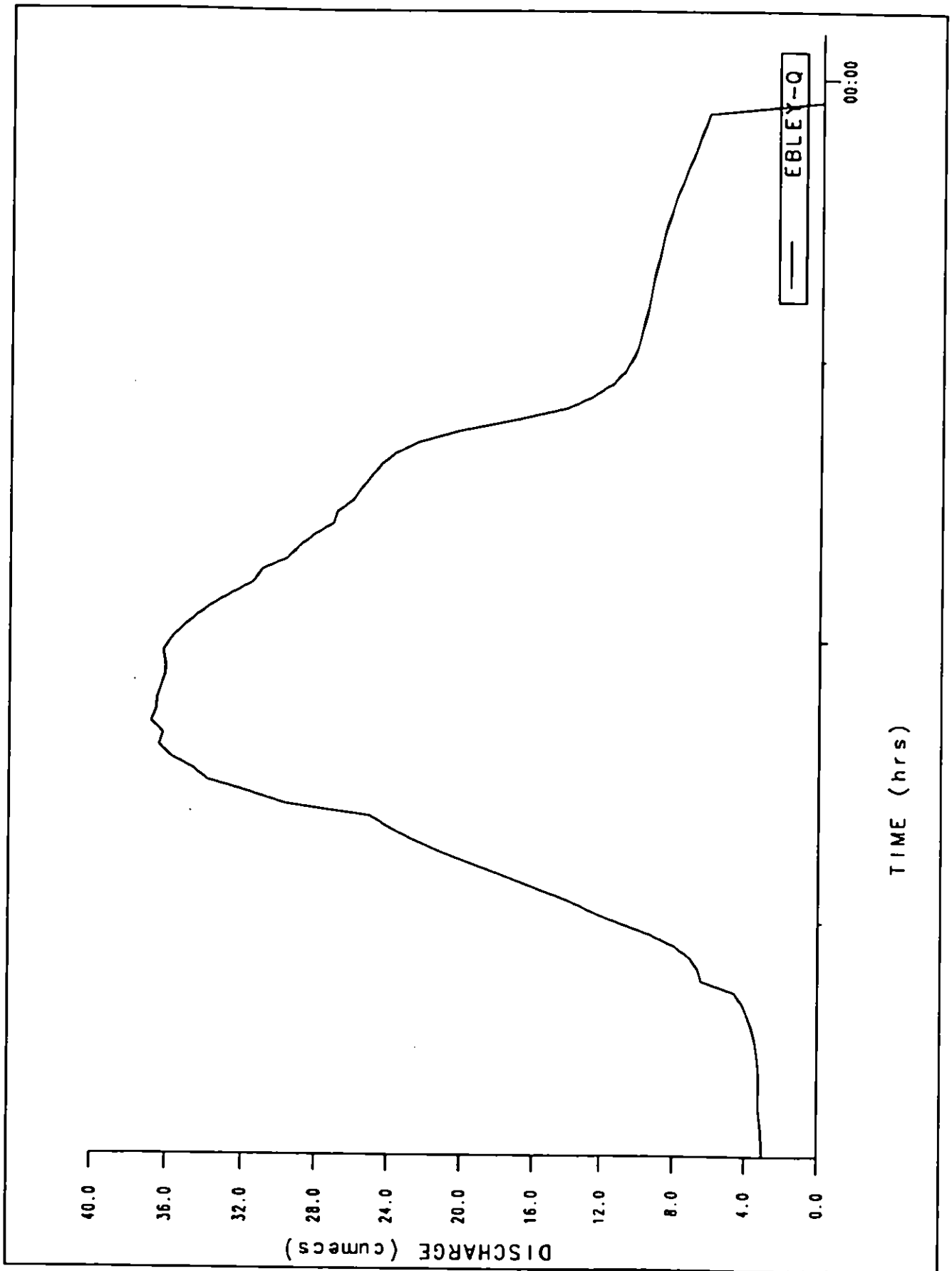


Figure 26 100 year return period flood event - discharge at Ebley Mill

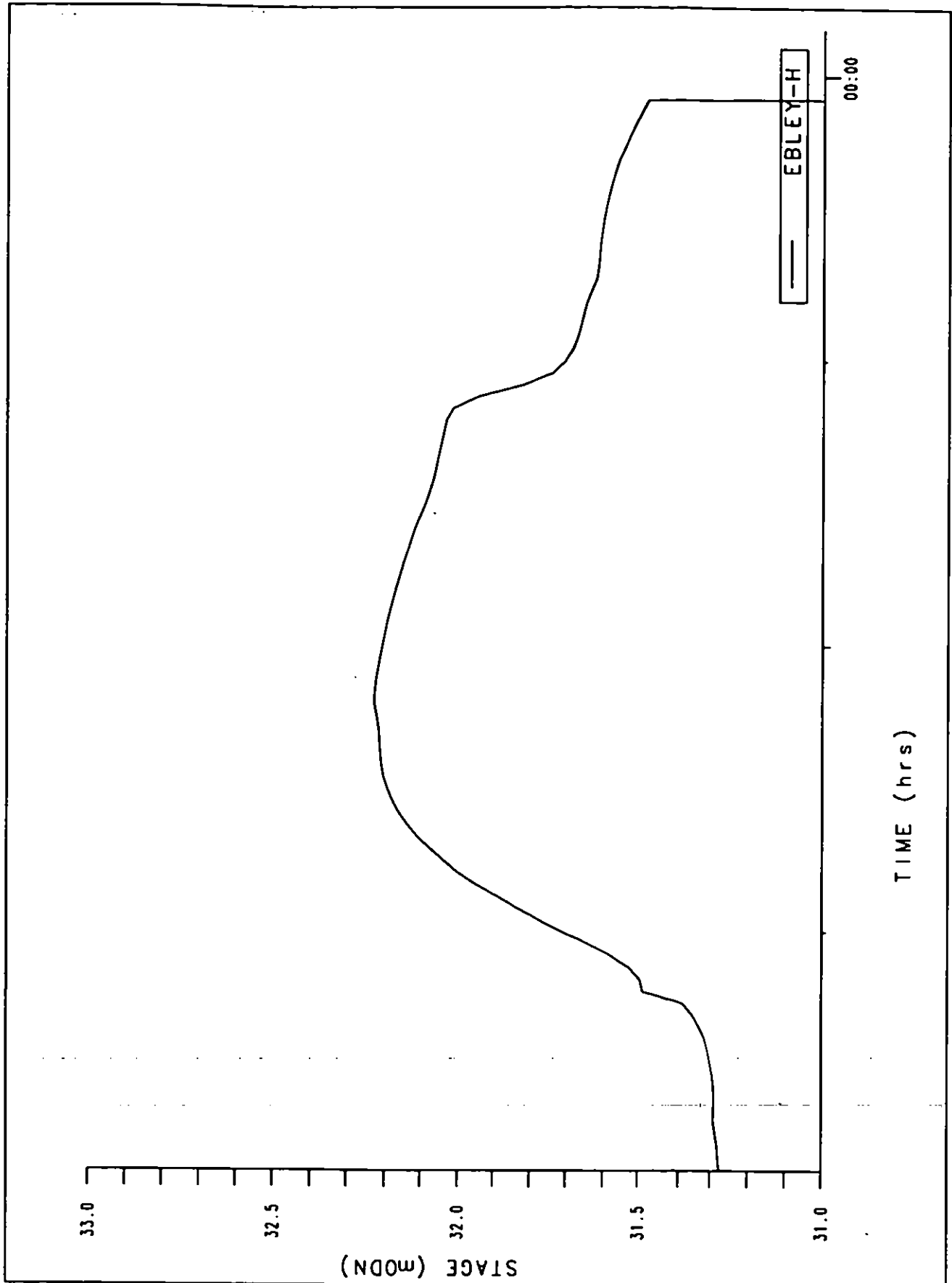


Figure 27 150 year return period flood event - stage at Ebley Mill

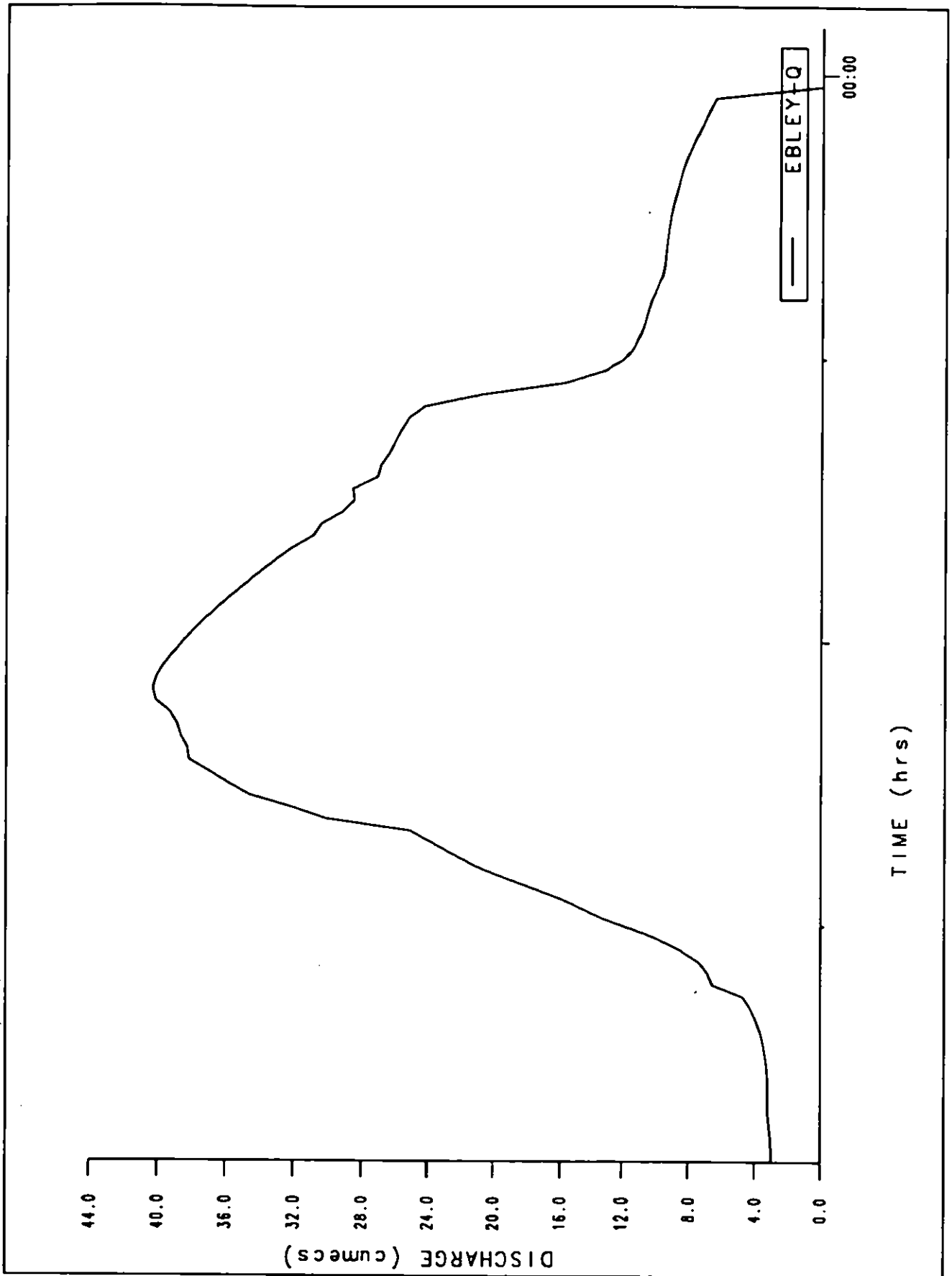


Figure 28 150 year return period flood event - discharge at Ebley Mill

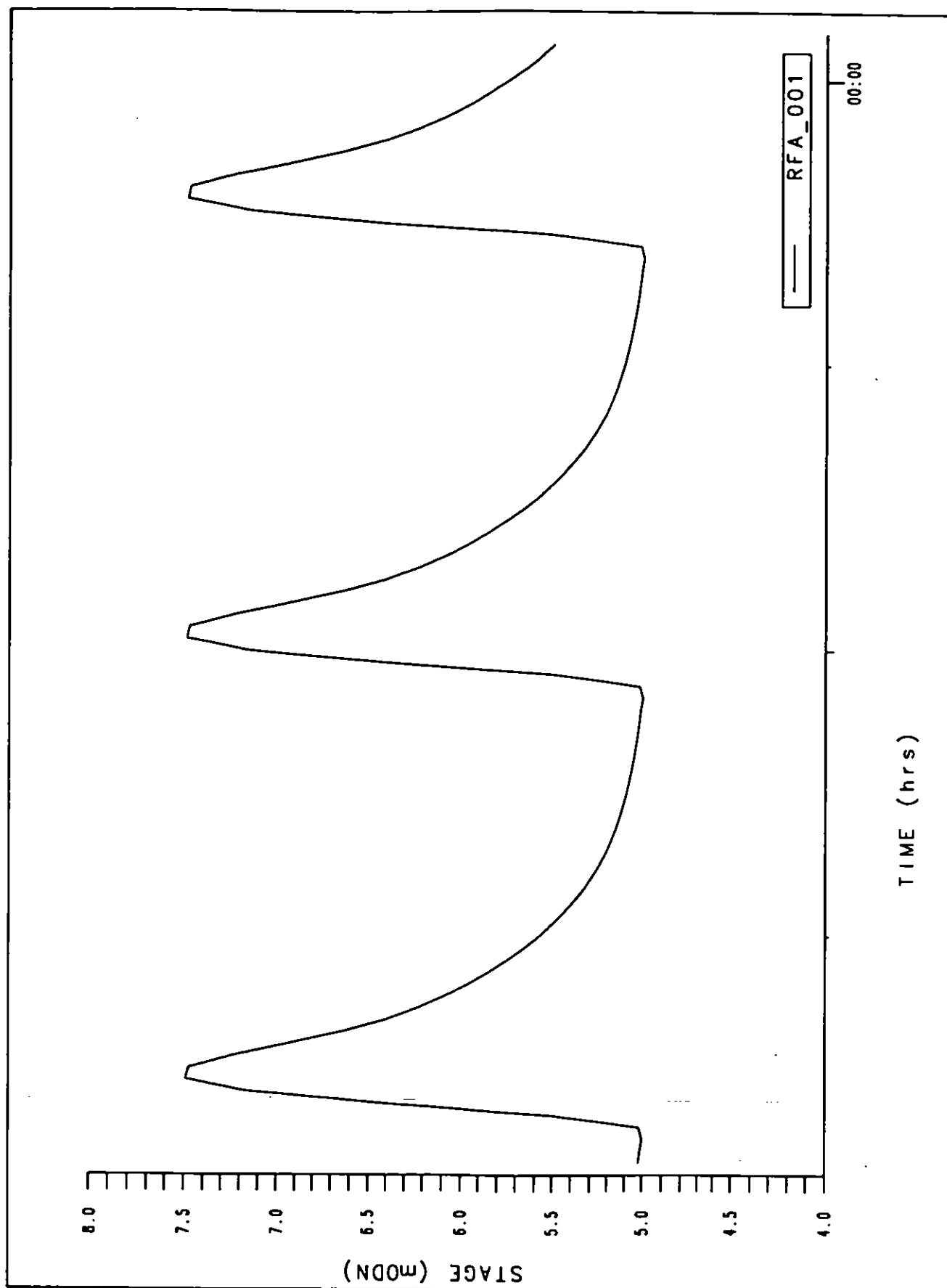


Figure 29 Design event downstream boundary condition

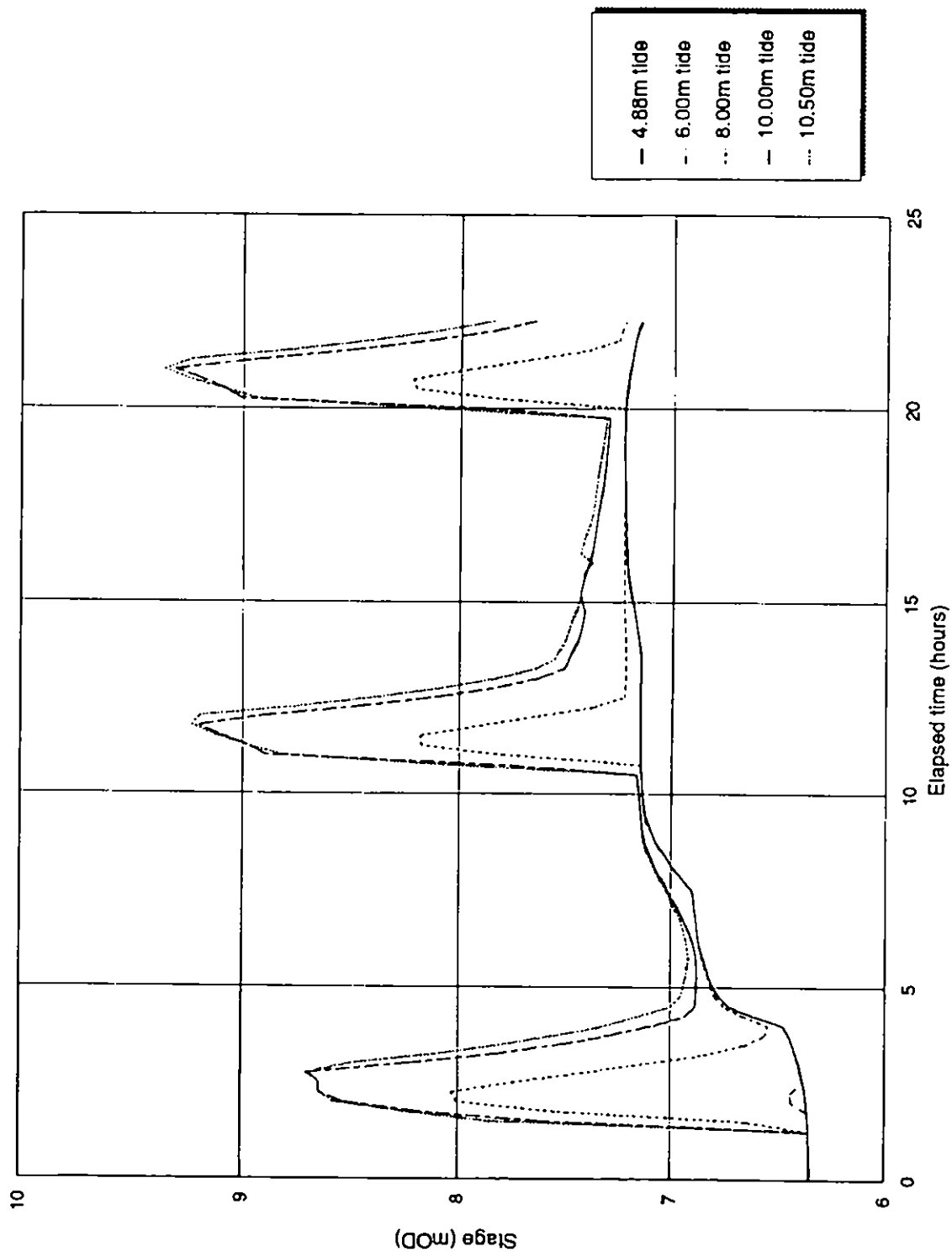


Figure 30 100 year water levels upstream of Framilode outfall

Appendices



Appendix 1

Design event maximum water levels

Section Label	5 Year Event		10 Year Event		25 Year Event		50 Year Event		100 Year Event		150 Year Event	
	Level (mOD)	Flow (m³/s)	Level (mOD)	Flow (m³/s)	Level (mOD)	Flow (m³/s)	Level (mOD)	Flow (m³/s)	Level (mOD)	Flow (m³/s)	Level (mOD)	Flow (m³/s)
RFA_001	7.49	15.0	7.49	16.0	7.49	17.3	7.49	17.5	7.49	17.6	7.49	20.6
River Severn Tidal Outfall												
RFA_001A	7.57	14.9	7.58	15.9	7.61	17.2	7.63	17.4	7.64	17.5	7.68	20.5
RFA_002	7.60	14.5	7.61	15.9	7.65	16.9	7.68	17.1	7.68	17.2	7.73	20.3
Upper Framtode Weir												
RFA_003	7.86	14.5	7.90	15.9	7.99	16.9	8.04	17.0	8.06	17.1	8.16	20.3
RFA_004	7.91	14.3	7.95	15.9	8.05	16.8	8.09	16.9	8.11	17.0	8.23	20.2
RFA_005	7.98	13.9	8.02	15.9	8.13	16.6	8.17	16.7	8.18	17.0	8.31	20.0
Junction with RFB_001												
RFA_006	7.98	6.5	8.02	7.4	8.13	7.8	8.17	7.8	8.18	8.0	8.31	9.9
RFA_007	8.01	6.4	8.06	7.4	8.17	7.7	8.20	7.8	8.21	8.0	8.35	9.8
RFA_008	8.05	6.4	8.09	7.4	8.20	7.7	8.24	7.7	8.25	8.0	8.39	9.7
RFA_008A	8.03	6.4	8.08	7.4	8.18	7.7	8.22	7.7	8.22	8.0	8.36	9.7
Gloucester & Sharpness Canal - Left Syphon												
RFA_009	8.11	6.4	8.17	7.4	8.30	7.6	8.33	7.7	8.34	8.0	8.55	9.7
RFA_010	8.18	6.4	8.24	7.4	8.37	7.6	8.41	7.7	8.42	8.0	8.65	9.7
RFA_011	8.20	6.4	8.25	7.4	8.39	7.6	8.42	7.7	8.43	8.0	8.68	8.4
RFA_012	8.25	6.4	8.32	7.4	8.44	7.6	8.47	7.7	8.48	8.0	8.71	8.5
Whitminster Weir - Left												
RFA_013	8.38	6.4	8.49	7.4	8.57	7.6	8.59	7.7	8.60	8.0	8.79	8.5
Junction with RFB_008												
RFA_014	8.38	13.9	8.49	15.9	8.57	16.2	8.59	16.5	8.60	17.5	8.79	19.8
RFA_015	8.36	13.9	8.48	15.9	8.56	16.2	8.58	16.4	8.59	17.5	8.78	19.9

Whitminster Bridge												
RFA_016	8.38	13.9	8.48	15.9	8.57	16.2	8.58	16.4	8.59	17.5	8.79	19.9
RFA_017	8.42	13.9	8.53	15.9	8.61	16.2	8.63	16.4	8.64	17.5	8.83	19.9
RFA_018	8.44	13.9	8.55	15.9	8.63	16.2	8.65	16.4	8.65	17.5	8.84	19.9
Wheatenhurst Sluices												
RFA_019	10.15	13.9	10.07	15.9	10.09	16.2	10.13	16.4	10.11	17.5	10.14	19.9
RFA_020	10.16	13.9	10.07	15.9	10.10	16.2	10.13	16.4	10.11	17.5	10.19	19.9
RFA_021	10.18	13.9	10.18	15.9	10.20	16.2	10.21	16.4	10.25	17.5	10.35	19.9
RFA_022	10.20	13.9	10.29	15.9	10.31	16.2	10.32	16.4	10.37	17.5	10.47	19.9
RFA_023	10.23	13.9	10.34	15.9	10.36	16.2	10.37	16.4	10.42	17.5	10.52	19.9
Walk Rhine Bridge												
RFA_024	10.27	13.9	10.39	15.9	10.40	16.2	10.41	16.4	10.47	17.5	10.58	19.9
RFA_025	10.34	13.9	10.47	15.9	10.48	16.2	10.49	16.4	10.55	17.5	10.68	18.0
RFA_026	10.39	13.9	10.51	15.9	10.53	16.2	10.54	16.4	10.60	17.5	10.71	18.0
RFA_027	10.45	14.0	10.58	15.9	10.60	16.2	10.61	16.4	10.66	17.5	10.75	18.0
RFA_028	10.55	14.0	10.67	15.9	10.69	16.2	10.70	16.4	10.76	17.5	10.82	18.0
RFA_029	10.66	14.0	10.76	15.9	10.80	16.2	10.81	16.4	10.86	17.5	10.90	18.0
RFA_030	10.76	14.0	10.88	15.9	10.90	16.2	10.91	16.4	10.97	17.5	11.00	18.0
RFA_031	10.84	14.0	10.95	15.9	10.97	16.2	10.98	16.4	11.03	17.5	11.08	18.0
RFA_032	10.91	14.0	11.03	15.9	11.04	16.2	11.05	16.4	11.11	17.5	11.14	18.0
Fromebridge Mill												
RFA_033	12.36	14.0	12.41	15.9	12.42	16.2	12.43	16.4	12.46	17.5	12.48	18.0
RFA_034	12.37	14.0	12.43	15.9	12.44	16.1	12.45	16.4	12.48	17.5	12.50	18.0
A38 Road Bridge												
RFA_035	12.41	14.0	12.49	15.9	12.50	16.1	12.51	16.4	12.56	17.5	12.58	18.0
RFA_036	12.43	14.0	12.51	17.8	12.52	18.6	12.53	19.4	12.58	23.5	12.60	25.0

RFA_037	12.44	14.0	12.54	17.8	12.55	18.6	12.56	19.4	12.61	24.6	12.63	26.7
RFA_038	12.46	14.0	12.57	18.0	12.58	19.2	12.59	20.6	12.66	29.7	12.67	33.9
RFA_039	12.48	14.0	12.59	18.0	12.61	19.2	12.62	20.6	12.71	29.7	12.74	33.9
MS Road Bridge												
RFA_040	12.51	14.0	12.62	18.0	12.64	19.2	12.66	20.6	12.78	29.7	12.83	33.9
RFA_041	12.59	14.1	12.73	18.0	12.75	19.2	12.79	20.6	12.98	28.1	13.07	30.7
RFA_042	12.69	14.1	12.85	18.0	12.89	19.2	12.94	19.9	13.19	21.4	13.29	22.1
RFA_043	12.78	14.1	12.95	18.0	12.99	19.2	13.04	19.9	13.27	21.4	13.36	22.1
Meadow Mill Wall												
RFA_044	13.71	14.1	14.14	18.0	14.27	19.2	14.35	19.9	14.43	21.4	14.45	22.1
RFA_045	13.74	14.1	14.15	18.9	14.26	25.2	14.33	30.6	14.40	36.3	14.42	38.8
RFA_046	13.77	14.1	14.19	18.9	14.31	25.3	14.40	30.7	14.48	36.4	14.50	39.3
Junction with RFC_001												
RFA_047	13.77	12.2	14.19	17.3	14.31	23.6	14.40	29.1	14.48	34.9	14.50	37.7
RFA_048	13.88	12.2	14.27	17.3	14.44	23.6	14.56	29.2	14.67	34.9	14.72	37.7
Meadow Bridge												
RFA_049	13.90	12.2	14.31	17.3	14.49	23.6	14.64	29.2	14.78	34.9	14.92	37.7
Junction with RFD_001												
RFA_050	13.90	6.8	14.31	11.2	14.49	14.5	14.64	17.5	14.78	19.3	14.92	19.9
RFA_051	14.07	6.8	14.46	10.5	14.64	11.4	14.78	12.4	14.90	12.7	15.01	12.7
RFA_052	14.25	6.9	14.61	10.6	14.77	11.1	14.89	11.3	15.00	11.4	15.09	11.3
RFA_053	14.46	5.8	14.78	6.3	14.89	6.5	14.97	6.7	15.05	6.8	15.12	6.8
Millend Mills Stulces												
RFA_054	15.66	5.8	15.73	6.3	15.76	6.5	15.79	6.7	15.80	6.8	15.80	6.8
RFA_055	15.90	5.8	15.94	6.3	15.97	6.5	15.98	6.7	15.99	6.7	16.00	6.8
RFA_056	16.10	5.8	16.14	6.3	16.16	6.5	16.17	6.7	16.18	6.7	16.18	6.8

RFA_057	16.24	5.8	16.28	6.3	16.30	6.5	16.31	6.7	16.32	6.7	16.32	6.8
RFA_058	16.36	5.8	16.40	6.3	16.42	6.5	16.43	6.6	16.44	6.7	16.44	6.8
RFA_059	16.47	5.8	16.51	6.2	16.54	6.5	16.55	6.7	16.56	6.8	16.56	6.9
RFA_060	16.57	6.0	16.61	7.2	16.63	7.9	16.64	8.4	16.64	8.8	16.65	8.9
RFA_061	16.67	6.0	16.73	7.2	16.76	7.9	16.78	8.4	16.79	8.8	16.80	8.9
RFA_062	16.79	6.0	16.87	7.2	16.91	7.9	16.93	8.5	16.95	9.0	16.96	9.3
RFA_063	16.91	5.9	16.99	7.2	17.04	7.9	17.07	8.5	17.10	9.2	17.11	9.6
RFA_064	17.03	5.9	17.12	7.1	17.17	7.9	17.21	8.5	17.24	8.9	17.27	9.0
RFA_065	17.20	5.9	17.29	7.1	17.35	8.0	17.38	9.0	17.42	9.2	17.43	9.4
RFA_066	17.34	5.9	17.44	7.1	17.50	7.4	17.56	7.5	17.59	7.5	17.60	7.5
RFA_067	17.48	5.9	17.57	8.0	17.60	8.9	17.62	9.0	17.64	9.1	17.65	9.0
RFA_068	17.58	5.9	17.69	8.9	17.73	10.6	17.74	11.0	17.75	11.3	17.75	11.4
RFA_069	17.73	5.9	17.91	8.9	18.00	10.7	18.02	11.3	18.03	11.7	18.03	11.9
RFA_070	17.90	5.9	18.09	8.9	18.18	13.0	18.20	14.8	18.21	15.8	18.22	16.3
RFA_071	18.08	5.9	18.28	8.9	18.45	13.0	18.52	15.3	18.54	17.1	18.55	18.1
Junction with RFF_001												
RFA_072	18.08	5.9	18.28	8.9	18.45	12.7	18.52	14.9	18.54	15.5	18.55	17.4
RFA_073	18.20	5.9	18.43	8.9	18.64	12.7	18.74	14.9	18.80	16.5	18.83	17.4
RFA_074	18.29	5.9	18.52	8.9	18.74	12.7	18.84	15.0	18.89	17.4	18.91	18.8
Beards Mill Bridge												
RFA_075	18.35	5.9	18.63	8.9	18.92	12.7	19.07	15.0	19.19	17.4	19.27	18.8
RFA_076	18.40	5.2	18.70	7.0	19.00	9.5	19.17	10.9	19.31	12.3	19.39	13.0
Beards Mill Side Weir												
RFA_077	19.85	5.2	20.02	7.0	20.22	9.5	20.33	10.9	20.44	12.3	20.49	13.0
Junction with RFF_003												
RFA_078	19.85	5.2	20.02	7.1	20.22	9.7	20.33	11.3	20.44	12.9	20.49	13.7

RFA_078A	19.91	5.2	20.08	7.1	20.29	9.5	20.40	11.0	20.51	12.9	20.56	14.2
RFA_079	20.12	5.6	20.25	5.8	20.44	6.0	20.55	6.0	20.66	6.1	20.72	6.1
RFA_080	20.28	5.6	20.34	6.0	20.47	6.3	20.58	6.4	20.69	6.5	20.75	6.6
RFA_081	20.42	5.6	20.47	6.0	20.55	6.3	20.62	6.4	20.71	6.5	20.77	6.5
RFA_082	20.62	5.6	20.65	6.0	20.69	6.5	20.72	6.9	20.77	7.1	20.81	7.3
RFA_083	20.79	5.6	20.83	6.0	20.87	6.5	20.89	6.8	20.92	7.1	20.95	7.3
RFA_084	20.94	5.5	20.98	6.0	21.03	6.5	21.05	6.8	21.08	7.1	21.09	7.3
RFA_085	21.06	5.5	21.10	6.0	21.14	6.5	21.17	6.8	21.19	7.0	21.21	7.2
RFA_086	21.34	5.5	21.37	5.9	21.42	6.4	21.44	6.7	21.46	7.0	21.48	7.2
RFA_087	21.66	5.5	21.70	5.9	21.74	6.4	21.76	6.7	21.78	7.0	21.79	7.2
Stanley Downton Bridge												
RFA_088	21.70	5.5	21.73	5.9	21.77	6.4	21.80	6.7	21.82	7.0	21.83	7.2
RFA_089	21.96	5.5	22.00	5.9	22.04	6.4	22.07	6.7	22.09	7.0	22.11	7.1
Stanley Downton Mill Race												
RFA_090	22.40	5.5	22.44	5.9	22.49	6.4	22.52	6.7	22.55	7.0	22.57	7.1
RFA_091	22.58	5.5	22.64	5.9	22.70	6.4	22.73	6.7	22.77	6.9	22.79	7.1
RFA_092	22.68	5.5	22.73	5.9	22.79	6.4	22.82	6.7	22.85	6.9	22.87	7.1
RFA_093	22.77	5.5	22.82	5.9	22.87	6.4	22.90	6.6	22.93	6.9	22.95	7.0
RFA_094	22.86	5.5	22.90	5.9	22.96	6.4	22.99	6.6	23.02	6.9	23.03	7.0
RFA_095	22.96	5.5	23.00	5.9	23.06	6.3	23.09	6.6	23.12	6.8	23.13	7.0
RFA_096	23.04	5.5	23.09	5.9	23.14	6.3	23.17	6.6	23.20	6.8	23.21	6.9
RFA_097	23.15	5.5	23.19	5.9	23.24	6.3	23.27	6.5	23.29	6.8	23.31	6.9
RFA_098	23.26	5.5	23.30	5.8	23.35	6.3	23.37	6.5	23.39	6.7	23.41	6.9
RFA_099	23.33	5.4	23.36	5.8	23.41	6.3	23.43	6.5	23.45	6.7	23.47	6.8
Junction with RFA_001												
RFA_100	23.33	5.4	23.36	5.8	23.41	6.3	23.43	6.5	23.45	6.7	23.47	6.8

RFA_101	23.51	5.4	23.55	5.8	23.59	6.3	23.61	6.5	23.63	6.7	23.64	6.8
RFA_102	23.80	5.4	23.83	5.8	23.87	6.2	23.89	6.5	23.91	6.7	23.91	6.8
RFA_103	24.11	5.4	24.14	5.8	24.18	6.2	24.19	6.4	24.21	6.6	24.22	6.7
Stanley Mills Weir												
RFA_104	28.08	5.4	28.11	5.8	28.13	6.2	28.15	6.4	28.16	6.6	28.17	6.7
RFA_105	28.09	5.4	28.12	5.8	28.14	6.2	28.16	6.4	28.17	6.6	28.18	6.7
Stanley Mills Bridge												
RFA_106	28.09	5.4	28.12	5.8	28.15	6.2	28.16	6.4	28.18	6.6	28.18	6.7
RFA_107	28.15	5.4	28.18	5.8	28.21	6.2	28.22	6.4	28.24	6.6	28.25	6.7
RFA_108	28.17	5.4	28.20	5.8	28.23	6.2	28.25	6.4	28.27	6.6	28.27	6.7
RFA_109	28.18	5.4	28.22	5.8	28.25	6.2	28.27	6.4	28.29	6.5	28.29	6.7
RFA_110	28.20	5.4	28.23	5.8	28.27	6.2	28.28	6.4	28.30	6.6	28.31	6.6
RFA_111	28.21	5.4	28.25	5.7	28.29	6.1	28.31	6.4	28.32	6.6	28.33	6.6
RFA_112	28.24	5.4	28.27	5.7	28.32	5.9	28.34	5.9	28.35	5.9	28.36	5.9
RFA_113	28.25	4.4	28.29	4.5	28.33	4.7	28.35	4.8	28.37	4.9	28.38	4.8
RFA_114	28.28	5.6	28.32	5.8	28.36	6.4	28.38	7.0	28.40	7.5	28.41	7.9
Redhill Bridge												
RFA_115	28.38	5.6	28.42	5.8	28.48	6.4	28.52	7.0	28.56	7.5	28.58	7.8
RFA_116	28.42	5.6	28.47	5.8	28.53	6.4	28.57	7.0	28.61	7.5	28.64	7.8
RFA_117	28.46	6.0	28.51	7.5	28.59	10.8	28.65	13.8	28.70	16.7	28.73	18.8
RFA_118	28.54	6.0	28.62	7.5	28.77	10.8	28.90	13.8	29.02	15.9	29.11	17.6
Refuse Tip Weir 1												
RFA_119	28.91	6.0	29.05	7.5	29.23	10.8	29.37	13.8	29.45	15.9	29.52	17.6
Junction with RFD_081												
RFA_120	28.91	15.9	29.05	20.0	29.23	26.9	29.37	32.9	29.45	37.0	29.52	40.2
RFA_121	29.16	15.9	29.32	20.0	29.54	26.9	29.70	32.9	29.80	37.0	29.87	40.2

Junction with RFH_001												
RFA_122	29.16	8.4	29.32	10.6	29.54	14.8	29.70	19.0	29.80	21.2	29.87	23.4
RFA_123	29.20	8.4	29.36	10.6	29.59	14.0	29.75	17.4	29.85	19.0	29.91	20.7
RFA_124	29.24	8.4	29.40	10.6	29.63	14.0	29.80	17.4	29.89	19.2	29.96	20.6
RFA_125	29.31	8.4	29.47	9.6	29.72	10.7	29.90	10.8	29.98	10.9	30.05	10.9
Ebley Corn Mill Bypass												
RFA_126	29.86	8.4	29.97	9.6	30.14	10.7	30.21	10.9	30.32	11.0	30.36	11.0
Junction with RFH_004												
RFA_127	29.86	15.9	29.97	19.0	30.14	23.5	30.21	24.9	30.32	26.4	30.36	26.4
RFA_128	29.98	16.4	30.07	20.0	30.18	25.7	30.24	27.4	30.30	29.0	30.33	29.4
Ebley Corn Mill Bridge												
RFA_129	30.07	16.4	30.19	20.0	30.34	25.7	30.40	27.4	30.48	29.1	30.54	29.5
RFA_130	30.20	16.4	30.33	20.0	30.53	23.4	30.59	24.7	30.66	26.8	30.70	27.6
RFA_131	30.31	16.4	30.43	20.0	30.61	23.6	30.79	54.1	30.82	56.4	30.82	57.8
RFA_132	30.48	16.4	30.60	20.4	30.72	26.9	30.77	32.8	30.83	35.9	30.87	38.2
RFA_133	30.61	16.4	30.76	20.4	30.93	26.9	31.05	33.0	31.11	36.8	31.15	40.3
RFA_134	30.71	16.4	30.88	20.4	31.08	26.9	31.23	33.0	31.31	37.4	31.37	40.3
RFA_135	30.66	16.4	30.80	20.4	31.01	24.3	31.18	26.9	31.28	28.5	31.35	29.7
Ebley Mill Bridge												
RFA_136	30.67	16.4	30.82	20.4	31.03	24.3	31.20	27.0	31.30	28.5	31.37	29.7
RFA_137	30.82	16.4	30.99	20.4	31.20	24.3	31.36	26.9	31.45	28.4	31.53	29.7
Ebley Mill Weir												
RFA_138	31.81	16.4	31.93	20.4	32.04	24.3	32.11	26.9	32.15	28.4	32.18	29.7
RFA_139	31.86	16.4	31.98	20.4	32.09	24.3	32.16	26.9	32.20	28.4	32.23	29.7
RFA_140	32.02	16.4	32.17	20.4	32.30	24.3	32.37	28.0	32.40	30.7	32.43	33.2
Junction with SCA_001												

RFA_141	32.02	11.7	32.17	14.7	32.30	16.6	32.37	17.9	32.40	19.5	32.43	20.3
RFA_142	32.13	11.7	32.28	14.7	32.38	18.7	32.43	21.8	32.46	23.6	32.48	24.4
RFA_143	32.29	11.6	32.45	14.6	32.59	18.7	32.68	22.0	32.73	24.5	32.74	25.7
RFA_144	32.29	11.6	32.43	14.6	32.57	18.7	32.65	22.0	32.69	24.5	32.71	25.7
Junction with RFX_001												
RFA_145	32.29	5.3	32.43	6.3	32.57	7.9	32.65	10.0	32.69	10.9	32.71	11.7
Dudbridge Road Culvert												
RFA_146	32.38	5.3	32.53	6.3	32.68	7.9	32.80	9.9	32.85	10.8	32.89	11.6
RFA_147	32.50	5.3	32.62	6.3	32.76	7.9	32.88	9.9	32.93	10.8	32.97	11.6
Redfers Mill Sluices												
RFA_148	34.40	5.3	34.37	6.3	34.49	7.9	34.65	9.9	34.71	10.8	34.74	11.6
RFA_149	34.40	5.3	34.37	6.3	34.49	7.9	34.65	9.9	34.71	10.8	34.74	11.6
RFA_150	34.40	5.2	34.37	6.3	34.51	7.9	34.66	9.9	34.72	10.8	34.75	11.6
RFA_151	34.43	5.2	34.53	6.3	34.68	7.9	34.84	9.9	34.91	10.8	34.95	11.6
RFA_152	34.61	5.2	34.72	6.2	34.87	7.8	35.04	9.8	35.10	10.7	35.15	11.6
RFA_153	34.65	5.2	34.76	6.2	34.91	7.8	35.08	9.8	35.15	10.7	35.20	11.5
Junction with RFN_001												
RFA_154	34.65	3.8	34.76	4.6	34.91	5.9	35.08	7.7	35.15	8.6	35.20	9.4
RFA_155	34.75	3.7	34.86	4.5	35.01	5.9	35.18	7.7	35.25	8.6	35.30	9.3
RFA_156	34.87	3.7	34.97	4.5	35.12	5.8	35.28	7.7	35.35	8.5	35.40	9.3
Fromehall Mill Bypass Sluices												
RFA_157	36.09	3.7	36.17	4.5	36.28	5.8	36.39	7.6	36.44	8.5	36.48	9.3
RFA_158	36.12	3.7	36.20	4.4	36.32	5.8	36.46	5.9	36.53	5.9	36.58	6.0
RFA_159	36.14	3.6	36.23	4.4	36.35	5.8	36.48	5.9	36.55	5.9	36.60	5.9
Fromehall Mill Bridge												
RFA_160	36.26	3.6	36.41	4.4	36.66	5.8	36.78	5.9	36.83	5.9	36.86	5.9

RFA_161	36.27	3.8	36.41	4.6	36.66	5.8	36.78	6.5	36.83	6.7	36.86	7.0
Junction with RFN_008												
RFA_162	36.27	5.2	36.41	6.3	36.66	7.8	36.78	8.6	36.83	8.8	36.86	9.1
RFA_163	36.32	5.2	36.46	6.3	36.71	7.8	36.82	9.7	36.86	10.6	36.88	11.4
RFA_163A	36.40	5.2	36.52	6.3	36.75	7.8	36.87	9.7	36.91	10.6	36.94	11.4
Lodgemore Mills Bridge												
RFA_164	36.44	5.2	36.56	6.2	36.78	7.8	36.91	9.7	36.95	10.6	36.99	11.4
RFA_165	36.45	5.2	36.57	6.2	36.79	7.8	36.92	9.7	36.96	10.6	37.00	11.4
Lodgemore Mills Sluices												
RFA_166	38.00	5.2	38.08	6.2	38.17	7.8	38.21	9.7	38.25	10.6	38.18	11.4
RFA_167	38.00	5.2	38.07	6.2	38.17	7.8	38.21	9.6	38.24	10.6	38.17	11.4
Lodgemore Mills Culvert												
RFA_168	38.15	5.2	38.28	6.2	38.45	7.8	38.79	9.6	38.90	10.6	39.00	11.3
RFA_169	38.17	5.1	38.29	6.2	38.46	7.7	38.79	9.6	38.91	10.6	39.00	11.3
RFA_170	38.25	5.1	38.37	6.2	38.54	7.7	38.85	9.6	38.96	10.7	39.05	11.3
Bath Road Bridge												
RFA_171	38.27	5.1	38.39	6.2	38.56	7.7	38.86	9.6	38.97	10.7	39.06	11.3
RFA_172	38.29	5.1	38.41	6.2	38.57	7.7	38.86	9.6	38.97	10.7	39.06	11.3
RFA_173	38.50	5.1	38.62	6.2	38.77	7.7	39.01	9.6	39.11	10.7	39.19	11.3
RFA_174	38.73	5.1	38.83	6.2	38.97	7.7	39.16	9.6	39.25	10.7	39.31	11.3
RFA_175	39.18	5.1	39.26	6.2	39.36	7.7	39.49	9.6	39.56	10.7	39.60	11.3
RFB_001	7.98	7.5	8.02	8.5	8.13	8.8	8.17	8.9	8.18	9.1	8.31	10.2
RFB_002	8.06	7.5	8.10	8.5	8.21	8.8	8.24	8.8	8.25	9.1	8.39	10.1
RFB_003	8.10	7.5	8.15	8.5	8.26	8.7	8.29	8.8	8.30	9.1	8.43	10.0
Gloucester & Sharpness Canal - Right Syphon												
RFB_004	8.20	7.5	8.26	8.5	8.39	8.7	8.42	8.8	8.43	9.1	8.63	10.0

RFB_005	8.28	7.5	8.36	8.5	8.47	8.7	8.49	8.8	8.50	9.0	8.71	9.1
RFB_006	8.33	7.5	8.43	8.5	8.52	8.8	8.53	9.3	8.54	9.6	8.73	12.5
RFB_007	8.36	7.5	8.46	8.5	8.54	8.8	8.56	9.3	8.57	9.6	8.76	12.5
Whitminster Weir - Right												
RFB_008	8.38	7.5	8.49	8.5	8.57	8.8	8.59	9.3	8.60	9.6	8.79	12.5
RFC_001	13.77	2.0	14.19	2.8	14.31	2.9	14.40	3.1	14.48	2.9	14.50	2.7
Caravan Park Weir												
RFC_001A	13.82	2.0	14.21	2.8	14.34	2.9	14.42	3.1	14.50	2.9	14.52	2.7
RFC_002	13.85	1.9	14.22	2.8	14.34	2.9	14.42	3.0	14.50	2.8	14.52	2.7
Spring Hill Bridge												
RFC_003	13.88	1.9	14.64	2.7	14.73	2.8	14.80	3.0	14.85	2.8	14.87	2.7
RFC_004	14.05	1.9	14.65	2.4	14.74	2.6	14.80	2.5	14.85	2.6	14.87	2.5
RFC_005	14.15	1.9	14.66	2.3	14.75	2.6	14.81	2.4	14.86	2.6	14.88	2.5
Churchend School Bridge												
RFC_006	14.51	1.9	15.37	2.3	15.41	2.6	15.44	2.3	15.47	2.5	15.47	2.4
RFC_007	14.60	1.9	15.38	1.9	15.42	1.9	15.44	1.9	15.47	1.9	15.48	1.9
Churchend School Weir												
RFC_008	15.58	1.9	15.62	1.9	15.63	1.9	15.64	1.9	15.65	1.9	15.65	1.9
RFC_009	15.69	1.9	15.70	1.9	15.71	1.9	15.71	1.9	15.71	1.9	15.72	1.9
RFD_001	13.80	5.4	14.31	6.1	14.49	9.1	14.64	11.7	14.78	15.6	14.92	17.8
RFD_002	13.95	5.4	14.33	5.7	14.54	5.9	14.70	6.0	14.87	6.7	15.01	8.6
RFD_003	14.01	5.4	14.35	5.7	14.55	5.9	14.71	6.0	14.88	6.1	15.02	6.2
Millend Lane Bridge												
RFD_004	14.06	5.4	14.43	5.7	14.66	5.9	14.82	6.0	14.99	6.1	15.14	6.2
RFD_005	14.13	5.4	14.45	5.7	14.67	5.9	14.83	6.0	15.00	6.1	15.14	6.2
Junction with RFE_001												

RFD_006	14.13	3.5	14.45	3.5	14.67	3.6	14.83	3.6	15.00	3.6	15.14	3.6
RFD_007	14.13	3.5	14.44	3.5	14.66	3.6	14.81	3.6	14.99	3.6	15.13	3.6
RFD_008	15.69	3.5	15.70	3.5	15.71	3.6	15.71	3.6	15.71	3.6	15.72	3.6
Junction with RFC_009												
RFD_008A	15.69	5.4	15.70	5.4	15.71	5.4	15.71	5.4	15.71	5.4	15.72	5.4
RFD_009	15.77	6.4	15.78	6.5	15.78	6.6	15.78	6.6	15.78	6.6	15.78	6.6
RFD_010	15.89	6.7	15.90	6.8	15.90	6.9	15.90	7.0	15.90	7.0	15.90	7.0
RFD_011	15.99	6.7	15.99	6.8	16.00	6.9	16.00	6.9	16.00	7.0	16.00	7.0
Junction with RFE_005												
RFD_012	15.99	7.3	15.99	7.4	16.00	7.5	16.00	7.6	16.00	7.6	16.00	7.6
RFD_013	16.09	8.3	16.10	8.7	16.10	8.9	16.10	9.1	16.10	9.1	16.11	9.2
RFD_014	16.20	8.3	16.22	8.7	16.23	8.9	16.23	9.1	16.23	9.1	16.23	9.2
RFD_015	16.37	8.3	16.39	8.7	16.40	8.9	16.41	9.0	16.41	9.1	16.41	9.1
RFD_016	16.54	8.3	16.56	8.7	16.57	8.9	16.58	9.0	16.58	9.1	16.59	9.1
RFD_017	16.71	8.3	16.74	8.7	16.75	8.9	16.76	9.0	16.76	9.1	16.76	9.1
Junction with RFQ_001												
RFD_018	16.71	6.3	16.74	6.6	16.75	6.8	16.76	6.8	16.76	6.9	16.76	6.9
RFD_019	16.94	6.3	16.97	6.6	16.98	6.8	16.99	6.8	16.99	6.9	16.99	6.9
Bonds Mill Culvert												
RFD_020	19.12	6.3	19.17	6.6	19.20	6.8	19.21	6.8	19.22	6.9	19.22	6.9
Junction with RFQ_006												
RFD_021	19.12	8.3	19.17	8.7	19.20	8.9	19.21	9.0	19.22	9.1	19.22	9.1
RFD_022	19.20	8.3	19.25	8.7	19.27	8.9	19.28	9.0	19.29	9.1	19.30	9.1
RFD_023	19.27	8.3	19.31	8.7	19.34	8.9	19.35	9.0	19.36	9.2	19.36	9.2
RFD_024	19.35	8.3	19.39	8.9	19.41	9.5	19.42	9.8	19.43	10.1	19.43	10.3
RFD_025	19.42	8.6	19.46	10.1	19.49	11.2	19.50	11.8	19.50	12.3	19.51	12.6

GWR Bridge												
RFD_026	19.70	8.6	19.79	10.1	19.86	11.2	19.89	11.7	19.93	12.3	19.95	12.6
Ocean Pool Bridge												
RFD_027	20.01	8.6	20.23	10.1	20.44	11.2	20.55	11.7	20.67	12.3	20.73	12.6
RFD_028	20.07	8.3	20.27	9.7	20.47	11.6	20.58	11.7	20.69	11.8	20.76	11.8
RFD_029	20.09	10.0	20.28	13.8	20.47	16.6	20.59	16.9	20.70	17.1	20.76	17.0
RFD_030	20.16	9.5	20.37	12.4	20.54	14.2	20.62	14.7	20.72	15.3	20.78	15.4
RFD_031	20.21	9.5	20.41	12.4	20.57	15.5	20.64	17.3	20.74	18.9	20.79	19.0
Junction with RFJ_001												
RFD_032	20.21	6.2	20.41	8.9	20.57	11.9	20.64	13.5	20.74	14.8	20.79	15.0
RFD_033	20.27	6.2	20.48	9.0	20.65	11.9	20.73	13.5	20.81	15.1	20.85	15.8
Junction with RFK_001												
RFD_034	20.27	3.5	20.48	3.8	20.65	4.0	20.73	4.2	20.81	4.4	20.85	4.5
Bridgend Mill Side Sluces												
RFD_035	21.46	3.5	21.49	3.8	21.52	4.0	21.55	4.2	21.58	4.4	21.60	4.5
Junction with RFJ_003												
RFD_036	21.46	6.8	21.49	7.2	21.52	7.6	21.55	8.0	21.58	8.5	21.60	8.7
RFD_037	21.48	6.8	21.51	7.2	21.54	7.6	21.57	8.0	21.60	8.5	21.62	8.7
Bridgend Mill Bridge												
RFD_038	21.80	6.8	21.98	7.2	22.06	7.6	22.14	8.0	22.23	8.5	22.28	8.7
RFD_039	21.91	6.1	22.00	6.5	22.08	6.9	22.16	7.2	22.24	7.6	22.29	7.8
Junction with RFK_004												
RFD_040	21.91	8.7	22.00	9.5	22.08	10.1	22.16	10.7	22.24	11.5	22.29	11.9
RFD_041	21.92	9.6	22.01	10.5	22.09	11.2	22.17	12.0	22.25	12.8	22.30	13.3
RFD_042	21.94	10.2	22.03	11.7	22.10	12.2	22.18	12.4	22.27	13.0	22.32	13.4
RFD_043	21.99	10.2	22.08	11.4	22.16	11.4	22.23	11.4	22.32	11.5	22.37	11.3

Bridgend Kennels Bridge													
RFD_044	22.08	10.2	22.28	11.4	22.37	11.5	22.44	11.4	22.50	11.5	22.54	11.3	
RFD_045	22.10	10.3	22.30	11.1	22.39	11.4	22.45	11.4	22.51	11.4	22.55	11.4	
RFD_046	22.12	10.3	22.31	11.1	22.40	11.4	22.47	11.4	22.53	11.4	22.56	11.4	
Junction with RFL_001													
RFD_047	22.12	6.3	22.31	6.4	22.40	6.4	22.47	6.5	22.53	6.5	22.56	6.5	
Bridgend Kennels Sluices													
RFD_048	22.79	6.3	22.80	6.4	22.82	6.4	22.85	6.5	22.88	6.5	22.89	6.5	
RFD_049	22.88	6.6	22.89	6.8	22.90	6.9	22.92	7.0	22.93	7.0	22.93	7.1	
RFD_050	22.95	6.6	22.96	6.8	22.97	6.9	22.98	7.0	22.99	7.0	23.00	7.0	
Downton Road Footbridge													
RFD_051	22.97	6.6	22.98	6.8	22.99	6.9	23.00	7.0	23.01	7.0	23.02	7.0	
RFD_052	23.08	6.6	23.09	6.8	23.10	6.9	23.11	6.9	23.12	6.9	23.12	7.0	
Upper Mills Footbridge													
RFD_053	23.18	6.6	23.21	6.8	23.23	6.9	23.25	6.9	23.26	6.9	23.27	7.0	
RFD_054	24.04	6.6	24.05	6.8	24.06	6.9	24.07	6.9	24.07	6.9	24.07	6.9	
Upper Mills Sluices													
RFD_055	24.99	6.6	25.07	6.8	25.10	6.9	25.10	6.9	25.11	6.9	25.11	6.9	
RFD_056	25.04	6.6	25.11	6.9	25.14	7.1	25.14	7.2	25.14	7.2	25.15	7.2	
RFD_057	25.07	6.8	25.13	8.3	25.16	9.3	25.16	9.4	25.16	9.6	25.16	9.6	
RFD_058	25.13	6.8	25.20	8.3	25.24	9.3	25.24	9.4	25.25	9.6	25.25	9.6	
RFD_059	25.15	6.8	25.23	8.3	25.27	9.3	25.28	9.4	25.28	9.5	25.29	9.6	
RFD_060	25.17	6.8	25.26	8.3	25.30	9.3	25.31	9.4	25.31	9.5	25.32	9.6	
Upper Mills Bridge													
RFD_061	25.20	6.8	25.30	8.3	25.35	9.3	25.35	9.4	25.36	9.5	25.37	9.6	
RFD_062	25.24	6.8	25.33	8.3	25.39	9.3	25.39	9.4	25.40	9.5	25.41	9.6	

RFD_063	25.27	6.8	25.37	8.3	25.43	9.2	25.44	9.4	25.44	9.5	25.45	9.6
RFD_064	25.32	6.8	25.43	8.3	25.49	9.2	25.49	9.4	25.50	9.5	25.51	9.6
RFD_065	25.37	6.7	25.48	8.8	25.53	10.9	25.54	11.2	25.54	11.5	25.55	11.6
RFD_066	25.40	6.7	25.52	9.4	25.57	12.5	25.58	13.0	25.59	13.5	25.59	13.7
Junction with RFL_016												
RFD_067	25.40	10.5	25.52	14.0	25.57	16.6	25.58	17.0	25.58	17.4	25.59	17.5
RyeFord Saw Mills Culvert												
RFD_068	27.74	10.5	27.74	14.0	27.57	16.6	27.73	17.0	27.65	17.4	27.67	17.5
RFD_069	27.74	10.5	27.74	14.0	27.63	16.6	27.73	16.9	27.72	17.0	27.73	17.1
RFD_070	27.75	10.4	27.74	14.0	27.76	17.6	27.81	18.7	27.84	19.1	27.84	19.3
RFD_071	27.75	10.4	27.75	14.0	27.82	17.6	27.86	18.6	27.88	19.2	27.89	19.4
RFD_072	27.76	10.4	27.75	13.9	27.93	18.1	27.96	20.1	27.97	21.0	27.98	21.6
RFD_073	27.77	10.4	27.77	13.9	28.01	18.1	28.04	20.0	28.06	21.0	28.08	21.6
RFD_074	27.77	10.4	27.83	13.9	28.07	18.1	28.12	20.0	28.14	21.0	28.16	21.6
RFD_075	27.78	10.4	27.88	13.9	28.12	18.1	28.17	20.0	28.20	20.9	28.22	21.5
RFD_076	27.80	9.9	28.03	12.5	28.29	15.9	28.36	17.8	28.39	18.6	28.41	19.2
RFD_077	27.88	9.9	28.12	12.5	28.37	16.2	28.43	19.1	28.46	20.5	28.48	21.3
RFD_078	27.95	9.9	28.20	12.5	28.45	16.2	28.53	19.1	28.57	20.4	28.59	21.4
Refuse Tip Weir 2												
RFD_079	28.59	9.9	28.73	12.5	28.92	16.2	29.06	19.1	29.12	20.4	29.17	21.4
RFD_080	28.61	9.9	28.75	12.5	28.93	16.2	29.06	19.1	29.11	21.1	29.15	22.7
Refuse Tip Weir 3												
RFD_081	28.91	9.9	29.05	12.5	29.23	16.2	29.37	19.1	29.45	21.1	29.52	22.7
RFE_001	14.13	1.9	14.45	2.2	14.67	2.3	14.83	2.4	15.00	2.5	15.14	2.5
RFE_002	14.70	0.9	14.73	1.0	14.81	1.1	14.93	1.1	15.07	1.1	15.19	1.1
RFE_003	14.72	0.6	14.75	0.6	14.83	0.6	14.94	0.7	15.08	0.7	15.20	0.7

RFE_004	14.73	0.6	14.76	0.6	14.84	0.6	14.95	0.6	15.09	0.6	15.21	0.6
Market Garden Weir												
RFE_005	15.99	0.6	15.99	0.6	16.00	0.6	16.00	0.6	16.00	0.6	16.00	0.6
RFF_001	18.08	0.0	18.28	0.1	18.45	0.3	18.52	0.4	18.54	0.6	18.55	0.7
RFF_002	18.08	0.0	18.28	0.1	18.45	0.3	18.52	0.4	18.54	0.6	18.56	0.7
Beards Mill Culvert												
RFF_003	19.85	0.0	20.02	0.1	20.22	0.3	20.33	0.4	20.44	0.6	20.49	0.7
RFQ_001	16.71	2.0	16.74	2.1	16.75	2.2	16.76	2.2	16.76	2.2	16.76	2.2
RFQ_002	16.77	2.0	16.80	2.1	16.81	2.2	16.82	2.2	16.82	2.2	16.82	2.2
RFQ_003	16.88	2.0	16.90	2.1	16.91	2.2	16.91	2.2	16.92	2.2	16.92	2.2
RFQ_004	17.07	2.0	17.08	2.1	17.09	2.2	17.10	2.2	17.10	2.2	17.10	2.2
RFQ_005	17.20	2.0	17.22	2.1	17.23	2.2	17.23	2.2	17.23	2.2	17.23	2.2
Bonds Mill Side Sluices												
RFQ_006	19.12	2.0	19.17	2.1	19.20	2.2	19.21	2.2	19.22	2.2	19.22	2.2
RFH_001	29.16	7.5	29.32	9.4	29.54	12.1	29.70	13.9	29.80	15.9	29.87	16.8
RFH_002	29.24	7.5	29.40	9.4	29.61	13.0	29.77	14.3	29.86	16.4	29.93	16.9
RFH_003	29.34	7.5	29.50	9.4	29.72	13.0	29.85	14.4	29.95	16.6	30.01	16.9
Ebley Corn Mill Culverts												
RFH_004	29.86	7.5	29.97	9.4	30.14	13.0	30.21	14.4	30.32	16.6	30.36	16.9
RFJ_001	20.21	3.3	20.41	3.5	20.57	3.6	20.64	3.8	20.74	4.0	20.79	4.2
RFJ_002	20.25	3.3	20.44	3.5	20.60	3.6	20.66	3.8	20.76	4.0	20.81	4.2
Bridgend Mill Culvert												
RFJ_003	21.46	3.3	21.49	3.5	21.52	3.6	21.55	3.8	21.58	4.0	21.60	4.2
RFK_001	20.27	2.7	20.48	5.2	20.65	7.9	20.73	9.3	20.81	10.6	20.85	11.2
RFK_002	20.52	2.7	20.73	3.0	20.95	3.2	21.04	3.5	21.12	3.9	21.16	4.1
RFK_003	20.81	2.7	20.85	3.0	21.00	3.2	21.08	3.5	21.15	3.9	21.18	4.1

Bridgend Mill Bypass Culvert													
RFL_004	21.91	2.7	22.00	3.0	22.08	3.2	22.16	3.5	22.24	3.9	22.29	4.1	
RFL_001	22.12	4.0	22.31	4.7	22.40	4.9	22.47	5.0	22.53	5.0	22.56	5.0	
RFL_002	22.26	3.7	22.40	4.4	22.48	5.2	22.55	6.1	22.61	6.8	22.65	7.4	
RFL_003	22.47	2.7	22.58	3.2	22.68	4.9	22.76	6.0	22.83	7.1	22.87	7.7	
RFL_004	22.71	2.7	22.78	2.9	22.94	3.1	23.02	3.2	23.09	3.5	23.13	3.6	
RFL_005	23.18	3.2	23.19	3.5	23.23	4.4	23.28	5.1	23.34	6.0	23.36	6.9	
RFL_006	23.43	3.5	23.46	3.8	23.49	3.9	23.52	3.9	23.57	3.9	23.59	3.9	
RFL_007	23.75	3.7	23.77	4.7	23.85	10.7	23.87	11.5	23.89	12.1	23.91	12.3	
RFL_008	23.99	2.6	24.11	2.6	24.16	2.6	24.20	2.6	24.22	2.6	24.23	2.6	
RFL_009	24.29	3.4	24.31	3.5	24.34	4.2	24.36	4.5	24.38	4.7	24.39	4.8	
RFL_010	24.40	3.4	24.41	3.6	24.47	4.2	24.50	4.4	24.52	4.5	24.53	4.6	
Banty Ditch Culvert													
RFL_011	25.11	3.4	25.16	3.6	25.33	4.5	25.35	4.6	25.37	4.7	25.38	4.7	
RFL_012	25.11	3.7	25.16	4.3	25.34	4.6	25.36	4.6	25.38	4.6	25.39	4.6	
RFL_013	25.12	3.7	25.17	4.6	25.35	4.8	25.36	4.8	25.38	4.8	25.39	4.8	
RFL_014	25.17	3.7	25.23	4.6	25.37	4.8	25.38	4.8	25.40	4.8	25.41	4.8	
Banty Ditch Weir													
RFL_015	25.40	3.7	25.51	4.6	25.58	4.8	25.57	4.8	25.58	4.8	25.58	4.8	
RFL_016	25.40	3.7	25.52	4.6	25.57	4.8	25.58	4.8	25.58	4.8	25.59	4.8	
RFM_001	23.33	0.1	23.36	0.1	23.41	0.1	23.43	0.1	23.45	0.1	23.47	0.1	
RFM_002	23.33	0.0	23.36	0.0	23.41	0.0	23.43	0.0	23.45	0.0	23.47	0.0	
RFM_003	23.33	0.0	23.36	0.0	23.41	0.0	23.43	0.0	23.45	0.0	23.47	0.0	
RFN_001	34.65	1.4	34.76	1.7	34.91	2.0	35.08	2.1	35.15	2.2	35.20	2.2	
RFN_002	34.69	1.4	34.79	1.7	34.93	2.0	35.09	2.1	35.16	2.1	35.21	2.2	
RFN_003	34.76	1.4	34.85	1.7	34.97	2.0	35.12	2.1	35.18	2.1	35.23	2.2	

RFX_004	34.80	1.4	34.89	1.7	35.00	2.0	35.13	2.1	35.19	2.1	35.24	2.2
Fromehall Mill Sluice												
RFX_005	36.27	1.4	36.41	1.7	36.66	2.0	36.78	2.1	36.83	2.1	36.86	2.2
RFX_006	36.27	1.4	36.41	1.7	36.66	2.0	36.78	2.1	36.83	2.1	36.86	2.2
RFX_001	32.29	6.7	32.43	8.5	32.57	10.9	32.65	13.0	32.69	14.3	32.71	15.2
RFX_002	32.29	6.7	32.44	8.5	32.58	10.9	32.67	13.0	32.71	14.3	32.73	15.2
RFX_003	32.31	6.7	32.46	8.5	32.61	10.9	32.70	13.0	32.75	14.3	32.77	15.2
Junction with NSA_001												
RFX_004	32.31	0.0	32.46	0.0	32.61	0.1	32.70	0.1	32.75	0.2	32.77	0.3
RFX_005	32.31	0.0	32.46	0.0	32.61	0.0	32.70	0.1	32.75	0.1	32.77	0.2
RFX_006	32.31	0.0	32.46	0.0	32.61	0.0	32.70	0.0	32.75	0.1	32.77	0.1
RFX_007	32.31	0.0	32.46	0.0	32.61	0.0	32.70	0.0	32.75	0.0	32.77	0.0
NSA_001	32.31	6.7	32.46	8.4	32.61	10.9	32.70	13.0	32.75	14.3	32.77	15.2
NSA_002	34.20	6.7	34.33	8.4	34.49	10.9	34.63	13.0	34.71	14.3	34.77	15.2
SCA_001	32.02	4.7	32.17	6.2	32.30	8.8	32.37	11.3	32.40	13.9	32.43	15.8
SCA_002	32.02	4.7	32.16	6.2	32.28	8.8	32.34	11.3	32.37	13.9	32.38	15.8
SCA_003	32.07	4.7	32.22	6.2	32.37	8.8	32.47	11.3	32.55	13.9	32.61	15.7
SCA_004	32.20	4.7	32.37	6.2	32.59	8.8	32.76	11.3	32.91	13.9	33.01	15.7
Dudbridge Lock Weir												
SCA_005	34.35	4.7	34.47	6.2	34.67	8.8	34.84	11.3	35.00	13.9	35.11	15.7
SCA_006	36.09	3.9	36.16	5.2	36.28	7.6	36.39	9.9	36.49	12.3	36.56	13.9
Ruscombe Brook Weir												
SCA_007	36.94	3.9	37.05	5.2	37.24	7.6	37.40	9.9	37.56	12.3	37.66	13.9
SCA_008	37.10	3.9	37.25	5.2	37.47	7.6	37.66	9.9	37.83	12.3	37.93	13.9
SCA_009	37.20	3.9	37.36	5.2	37.60	7.6	37.80	9.9	37.97	12.3	38.07	13.9
SCA_010	37.23	3.9	37.40	5.2	37.66	7.6	37.87	9.9	38.05	12.3	38.17	13.9

SCA_011	37.37	3.9	37.54	5.2	37.80	7.6	38.01	9.9	38.19	12.3	38.31	13.9
SCA_012	37.43	2.2	37.61	2.8	37.91	3.7	38.14	4.6	38.34	5.5	38.47	6.1
Palnewick Stream Weir												
SCA_013	37.75	2.2	37.81	2.8	37.99	3.7	38.21	4.6	38.41	5.5	38.53	6.1
SCA_014	37.76	2.2	37.82	2.8	38.01	3.8	38.22	4.7	38.42	5.6	38.54	6.3
Calnecross Road Weir												
SCA_015	39.87	2.2	39.94	2.8	40.05	3.8	40.14	4.7	40.23	5.7	40.29	6.3
SCA_016	40.02	2.2	40.11	2.8	40.23	3.8	40.33	4.7	40.43	5.7	40.49	6.3

Model Cell	5 Year Event		10 Year Event		25 Year Event		50 Year Event		100 Year Event		150 Year Event	
	Level (mOD)	Depth (m)	Level (mOD)	Depth (m)	Level (mOD)	Depth (m)	Level (mOD)	Depth (m)	Level (mOD)	Depth (m)	Level (mOD)	Depth (m)
Cell 1	8.20	0.00	8.20	0.00	8.20	0.00	8.20	0.00	8.20	0.00	8.20	0.00
Cell 2	8.10	0.00	8.10	0.00	8.10	0.00	8.10	0.00	8.10	0.00	8.10	0.00
Cell 3	7.70	0.00	7.70	0.00	7.86	0.16	8.09	0.39	8.51	0.81	8.71	1.01
Cell 4	8.10	0.00	8.10	0.00	8.31	0.21	8.33	0.23	8.51	0.41	8.71	0.61
Cell 5	8.40	0.00	8.40	0.00	8.40	0.00	8.40	0.00	8.40	0.00	8.71	0.32
Cell 6	8.20	0.00	8.20	0.00	8.20	0.00	8.20	0.00	8.20	0.00	8.20	0.00
Cell 7	8.40	0.00	8.40	0.00	8.40	0.00	8.40	0.00	8.40	0.00	8.40	0.00
Cell 8	8.80	0.00	8.80	0.00	8.80	0.00	8.80	0.00	8.80	0.00	8.80	0.00
Cell 9	8.37	0.00	8.37	0.00	8.37	0.00	8.37	0.00	8.37	0.00	8.37	0.00
Cell 10	8.38	0.09	8.38	0.09	8.38	0.09	8.38	0.09	8.38	0.09	8.38	0.09
Cell 11	9.00	0.00	9.00	0.00	9.33	0.33	9.68	0.68	10.39	1.39	10.74	1.74
Cell 12	9.00	0.00	9.00	0.00	9.33	0.33	9.68	0.68	10.39	1.39	10.74	1.74
Cell 13	9.00	0.00	9.00	0.00	9.46	0.46	9.68	0.68	10.39	1.39	10.74	1.74
Cell 14	8.90	0.00	8.90	0.00	9.47	0.57	9.68	0.78	10.39	1.49	10.75	1.85
Cell 15	9.30	0.00	9.30	0.00	9.66	0.36	9.68	0.38	10.39	1.09	10.75	1.45
Cell 16	9.50	0.00	10.23	0.73	10.44	0.94	10.44	0.94	10.47	0.97	10.75	1.25
Cell 17	9.40	0.00	10.23	0.83	10.44	1.04	10.44	1.04	10.47	1.07	10.75	1.35
Cell 18	9.40	0.00	10.23	0.83	10.44	1.04	10.44	1.04	10.47	1.07	10.76	1.36
Cell 19	10.60	0.00	10.60	0.00	10.60	0.00	10.60	0.00	10.60	0.00	10.60	0.00
Cell 20	11.50	0.00	11.50	0.00	12.03	0.53	12.59	1.09	12.65	1.15	12.67	1.17
Cell 21	10.40	0.00	10.88	0.48	10.94	0.54	11.00	0.60	11.32	0.92	11.58	1.18
Cell 21A	11.00	0.00	11.31	0.31	11.32	0.32	11.32	0.32	11.36	0.36	11.59	0.59
Cell 22	11.50	0.00	11.50	0.00	12.03	0.53	12.59	1.09	12.65	1.15	12.67	1.17

Cell 23	10.40	0.00	10.40	0.00	10.40	0.00	10.40	0.00	10.40	0.00	10.40	0.00	11.32	0.92	11.58	1.18
Cell 24	11.00	0.00	11.00	0.00	12.03	1.03	12.59	1.59	12.65	1.65	12.67	1.67	12.65	1.65	12.67	1.67
Cell 25	10.90	0.00	10.90	0.00	10.90	0.00	10.90	0.00	11.64	0.74	11.67	0.77	11.64	0.74	11.67	0.77
Cell 26	11.00	0.00	11.32	0.32	12.03	1.03	12.59	1.59	12.65	1.65	12.67	1.67	12.65	1.65	12.67	1.67
Cell 27	11.50	0.00	11.50	0.00	11.50	0.00	11.50	0.00	11.50	0.00	11.50	0.00	11.50	0.00	11.50	0.00
Cell 28	11.50	0.00	11.50	0.00	12.03	0.53	12.59	1.09	12.65	1.15	12.67	1.17	12.65	1.15	12.67	1.17
Cell 29	12.00	0.00	12.00	0.00	12.00	0.00	12.00	0.00	12.00	0.00	12.00	0.00	12.00	0.00	12.00	0.00
Cell 30	11.50	0.00	11.50	0.00	12.87	1.37	13.44	1.94	13.53	2.03	13.55	2.05	13.53	2.03	13.55	2.05
Cell 31	12.50	0.00	12.50	0.00	12.50	0.00	12.50	0.00	12.50	0.00	12.50	0.00	12.50	0.00	12.50	0.00
Cell 32	12.00	0.00	12.00	0.00	12.87	0.87	13.44	1.44	13.53	1.53	13.56	1.56	13.53	1.53	13.56	1.56
Cell 33	13.20	0.00	13.20	0.00	13.20	0.00	13.20	0.00	13.20	0.00	13.20	0.00	13.20	0.00	13.20	0.00
Cell 34	12.50	0.00	12.50	0.00	12.93	0.43	13.45	0.94	13.54	1.04	13.56	1.06	13.54	1.04	13.56	1.06
Cell 35	13.50	0.00	13.61	0.11	14.26	0.76	14.33	0.83	14.40	0.90	14.42	0.92	14.40	0.90	14.42	0.92
Cell 36	12.50	0.00	13.03	0.53	13.12	0.62	13.45	0.95	13.55	1.05	13.58	1.08	13.55	1.05	13.58	1.08
Cell 37	13.50	0.00	13.50	0.00	13.61	0.11	14.40	0.90	14.47	0.97	14.50	1.00	14.47	0.97	14.50	1.00
Cell 38	13.50	0.00	13.50	0.00	13.50	0.00	13.50	0.00	13.70	0.20	13.82	0.32	13.70	0.20	13.82	0.32
Cell 39	14.30	0.00	14.30	0.00	14.30	0.00	14.30	0.00	14.30	0.00	14.30	0.00	14.30	0.00	14.30	0.00
Cell 40	14.25	0.00	14.25	0.00	14.25	0.00	14.25	0.00	14.25	0.00	14.30	0.06	14.25	0.00	14.30	0.06
Cell 41	14.50	0.00	14.81	0.31	14.90	0.40	14.95	0.45	15.02	0.52	15.10	0.60	15.02	0.52	15.10	0.60
Cell 42	14.60	0.70	14.81	0.91	14.91	1.01	14.98	1.08	15.05	1.15	15.12	1.22	15.05	1.15	15.12	1.22
Cell 43	14.75	0.35	14.84	0.44	14.94	0.54	15.02	0.61	15.09	0.69	15.16	0.76	15.09	0.69	15.16	0.76
Cell 44	15.11	0.61	15.14	0.64	15.17	0.67	15.19	0.69	15.22	0.72	15.26	0.76	15.22	0.72	15.26	0.76
Cell 45	15.67	1.27	15.70	1.30	15.73	1.33	15.74	1.34	15.76	1.36	15.77	1.37	15.76	1.36	15.77	1.37
Cell 46	15.78	1.38	15.81	1.41	15.84	1.44	15.87	1.47	15.90	1.50	15.92	1.52	15.90	1.50	15.92	1.52
Cell 47	16.16	0.41	16.20	0.45	16.23	0.47	16.25	0.50	16.27	0.52	16.28	0.53	16.27	0.52	16.28	0.53
Cell 48	16.35	0.35	16.38	0.38	16.41	0.41	16.43	0.43	16.45	0.45	16.47	0.47	16.45	0.45	16.47	0.47

Cell 49	16.91	0.17	16.94	0.19	16.97	0.22	16.99	0.24	17.01	0.26	17.02	0.27
Cell 50	17.21	0.21	17.24	0.24	17.27	0.27	17.29	0.29	17.30	0.30	17.31	0.31
Cell 51	17.71	0.26	17.72	0.27	17.75	0.30	17.77	0.32	17.78	0.33	17.79	0.34
Cell 52	18.42	0.52	18.43	0.53	18.44	0.54	18.45	0.55	18.47	0.57	18.48	0.58
Cell 53	17.20	0.00	17.20	0.00	17.34	0.14	17.38	0.18	17.45	0.25	17.47	0.27
Cell 54	17.00	0.00	17.00	0.00	17.56	0.56	17.64	0.64	17.68	0.68	17.69	0.69
Cell 55	17.75	0.00	17.75	0.00	17.79	0.04	17.82	0.07	17.86	0.11	17.88	0.13
Cell 56	18.25	0.00	18.25	0.00	18.30	0.05	18.33	0.08	18.36	0.10	18.37	0.12
Cell 57	19.00	0.00	19.00	0.00	19.76	0.76	19.78	0.78	19.80	0.80	19.80	0.81
Cell 58	20.07	1.07	20.26	1.26	20.45	1.45	20.57	1.57	20.68	1.68	20.74	1.74
Cell 59	20.07	1.07	20.27	1.27	20.46	1.46	20.57	1.57	20.69	1.69	20.75	1.75
Cell 60	20.07	0.67	20.27	0.87	20.46	1.06	20.58	1.18	20.70	1.29	20.76	1.36
Cell 61	20.50	0.00	20.50	0.00	20.55	0.05	20.61	0.11	20.72	0.22	20.78	0.28
Cell 62	20.80	0.00	21.16	0.36	21.23	0.43	21.26	0.46	21.29	0.48	21.30	0.50
Cell 63	21.20	0.00	21.55	0.35	21.59	0.40	21.63	0.43	21.66	0.46	21.67	0.47
Cell 64	20.09	0.29	20.28	0.48	20.47	0.67	20.59	0.79	20.70	0.90	20.77	0.97
Cell 65	20.22	0.22	20.38	0.38	20.55	0.55	20.63	0.63	20.73	0.73	20.79	0.79
Cell 66	21.56	1.16	21.59	1.19	21.61	1.21	21.62	1.23	21.64	1.25	21.66	1.26
Cell 67	21.92	0.42	22.00	0.50	22.08	0.58	22.16	0.66	22.25	0.75	22.30	0.80
Cell 68	21.94	0.39	22.02	0.47	22.10	0.55	22.18	0.63	22.27	0.72	22.32	0.77
Cell 69	21.89	0.09	22.30	0.50	22.39	0.59	22.46	0.66	22.52	0.72	22.55	0.75
Cell 70	21.90	0.00	22.31	0.41	22.41	0.51	22.49	0.59	22.56	0.66	22.59	0.69
Cell 71	22.31	0.31	22.41	0.41	22.47	0.47	22.54	0.54	22.60	0.60	22.64	0.64
Cell 72	23.00	0.00	23.00	0.00	23.02	0.02	23.28	0.28	23.33	0.33	23.34	0.34
Cell 73	23.45	0.25	23.48	0.28	23.55	0.35	23.61	0.41	23.70	0.50	23.75	0.55
Cell 74	22.82	0.82	22.83	0.83	22.84	0.83	22.84	0.84	22.85	0.85	22.86	0.86

Cell 75	22.83	0.33	22.92	0.42	23.00	0.50	23.08	0.58	23.15	0.65	23.18	0.68
Cell 76	23.12	0.12	23.16	0.16	23.21	0.21	23.26	0.26	23.32	0.32	23.35	0.35
Cell 77	23.40	0.30	23.44	0.34	23.47	0.37	23.50	0.40	23.54	0.43	23.56	0.46
Cell 78	24.09	0.19	24.16	0.26	24.20	0.29	24.21	0.31	24.23	0.33	24.24	0.34
Cell 79	23.84	0.04	24.11	0.31	24.20	0.40	24.30	0.50	24.35	0.55	24.38	0.57
Cell 80	24.25	0.00	24.25	0.00	24.50	0.25	24.54	0.29	24.57	0.32	24.59	0.34
Cell 81	24.84	0.44	24.84	0.44	24.90	0.50	24.95	0.55	24.99	0.59	25.01	0.61
Cell 82	23.60	0.00	23.60	0.00	23.60	0.00	23.94	0.34	24.57	0.97	24.59	0.99
Cell 83	24.26	0.26	25.01	1.01	25.34	1.34	25.36	1.36	25.38	1.38	25.39	1.39
Cell 84	24.21	0.11	25.09	0.99	25.36	1.26	25.38	1.28	25.40	1.30	25.41	1.31
Cell 85	27.01	0.11	27.00	0.10	27.44	0.54	27.82	0.92	27.84	0.94	27.85	0.95
Cell 86	27.10	0.00	27.10	0.00	27.10	0.00	27.10	0.00	27.10	0.00	27.10	0.00
Cell 87	26.40	0.00	26.40	0.00	26.40	0.00	26.40	0.00	26.40	0.00	26.40	0.00
Cell 88	24.70	0.00	24.70	0.00	25.27	0.57	25.89	1.29	26.39	1.69	26.68	1.98
Cell 88A	25.72	0.32	25.96	0.56	26.46	1.06	26.54	1.14	26.61	1.21	26.78	1.38
Cell 89	26.46	0.21	26.46	0.21	26.51	0.26	26.57	0.32	26.63	0.38	26.79	0.54
Cell 89A	26.46	0.21	26.46	0.21	26.50	0.25	26.56	0.31	26.63	0.38	26.79	0.54
Cell 90	26.75	0.00	27.24	0.49	27.48	0.73	27.63	0.88	27.67	0.92	27.71	0.96
Cell 90A	26.75	0.00	27.24	0.49	27.48	0.73	27.62	0.88	27.66	0.91	27.70	0.95
Cell 91A	27.50	0.00	27.50	0.00	27.50	0.00	27.50	0.00	27.50	0.00	27.50	0.00
Cell 92	28.27	0.38	28.32	0.41	28.35	0.45	28.39	0.49	28.42	0.52	28.44	0.54
Cell 93	29.25	0.00	29.25	0.00	29.61	0.36	29.77	0.52	29.86	0.61	29.93	0.68
Cell 93A	28.27	0.87	28.31	0.91	28.35	0.95	28.37	0.97	28.39	0.99	28.40	1.00
Cell 94	30.00	0.00	30.33	0.33	30.55	0.55	30.62	0.62	30.68	0.68	30.72	0.72
Cell 94A	28.27	1.01	28.30	1.05	28.34	1.09	28.36	1.11	28.38	1.13	28.39	1.14
Cell 95	29.30	0.00	30.55	1.25	30.63	1.33	30.75	1.45	30.78	1.48	30.79	1.49

Cell 95A	28.00	0.00	28.00	0.00	28.00	0.00	28.28	0.28	28.30	0.30	28.31	0.31
Cell 96	29.97	0.47	30.04	0.54	30.12	0.62	30.23	0.73	30.26	0.76	30.28	0.79
Cell 97	29.97	0.22	30.04	0.29	30.12	0.37	30.24	0.49	30.27	0.52	30.30	0.55
Cell 98	30.90	0.00	30.90	0.00	31.77	0.87	31.89	0.99	31.96	1.06	32.03	1.13
Cell 99	31.50	0.00	31.50	0.00	32.15	0.65	32.19	0.69	32.21	0.71	32.23	0.73
Cell 100	32.00	0.00	32.02	0.02	32.16	0.16	32.21	0.21	32.23	0.23	32.26	0.26
Cell 101	32.00	0.00	32.00	0.00	32.00	0.00	32.27	0.27	32.60	0.60	32.62	0.62
Cell 102	36.40	0.00	36.40	0.00	36.66	0.26	36.77	0.37	36.81	0.41	36.84	0.43
Cell 103	36.24	0.24	36.41	0.41	36.66	0.66	36.77	0.78	36.81	0.81	36.84	0.84
Cell 104	38.35	0.00	38.35	0.00	38.35	0.00	38.35	0.00	38.96	0.61	39.05	0.70

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RFA_193	44.56	4.8	44.68	5.8	44.89	7.5	45.10	9.2	45.58	10.4	45.82	11.0
RFA_194	44.56	4.8	44.68	5.8	44.89	7.5	45.11	9.2	45.58	10.4	45.81	11.0
Bowbridge Estate Bridge												
RFA_195	44.61	4.8	44.73	5.8	44.94	7.5	45.15	9.2	45.61	10.3	45.84	11.0
RFA_196	44.59	4.8	44.70	5.8	44.91	7.5	45.12	9.2	45.59	10.3	45.83	11.0
RFA_197	44.96	4.8	45.07	5.8	45.24	7.5	45.41	9.1	45.73	10.3	45.93	11.0
RFA_198	45.09	4.8	45.20	5.8	45.37	7.4	45.53	9.1	45.80	10.3	45.98	11.0
Bowbridge Estate Bridge 2												
RFA_199	45.08	4.8	45.19	5.8	45.37	7.4	45.54	9.1	45.83	10.3	46.03	11.0
RFA_200	45.14	4.8	45.24	5.8	45.41	7.4	45.58	9.1	45.85	10.3	46.04	11.0
RFA_201	45.27	4.8	45.37	5.7	45.54	7.4	45.69	9.1	45.92	10.3	46.10	11.0
RFA_202	45.35	4.8	45.45	5.7	45.61	7.4	45.77	9.1	45.98	10.3	46.14	10.9
RFA_203	45.38	4.8	45.47	5.7	45.63	7.4	45.78	9.1	45.99	10.3	46.15	10.9
Butterow Footpath Bridge												
RFA_204	45.59	4.8	45.73	5.7	46.06	7.4	46.14	9.1	46.25	10.3	46.34	10.9
RFA_205	45.72	4.7	45.83	5.7	46.10	7.4	46.18	9.0	46.28	10.2	46.37	10.9
RFA_206	45.82	4.7	45.90	5.7	46.11	7.4	46.19	9.0	46.28	10.2	46.36	10.9
RFA_207	46.06	4.7	46.13	5.7	46.26	7.4	46.35	9.0	46.42	10.2	46.48	10.9
Thrupp Works Weir												
RFA_208	46.61	4.7	46.74	5.7	46.99	7.4	47.13	9.0	47.20	10.2	47.25	10.9
RFA_209	46.61	4.7	46.74	5.7	46.99	7.4	47.12	9.0	47.20	10.2	47.24	10.9
Junction with RFO_001												
RFA_210	46.61	2.4	46.74	2.9	46.99	3.5	47.12	4.2	47.20	4.7	47.24	5.0
RFA_211	46.64	2.4	46.77	2.9	47.00	3.6	47.14	4.1	47.21	4.6	47.26	4.8
RFA_212	46.73	2.4	46.85	2.9	47.06	3.6	47.18	4.4	47.25	5.1	47.30	5.5
RFA_213	46.77	2.4	46.89	2.9	47.09	3.6	47.21	4.4	47.29	5.1	47.33	5.5

RFA_214	48.95	2.4	47.03	2.9	47.19	3.6	47.30	4.4	47.37	5.1	47.41	5.4
Griffin Mill Footbridge 1												
RFA_215	47.66	2.4	47.82	2.9	47.96	3.6	48.15	4.4	48.33	5.1	48.41	5.4
RFA_216	47.69	2.4	47.83	2.9	47.98	3.6	48.17	4.4	48.34	5.1	48.42	5.4
RFA_217	47.72	2.3	47.86	2.8	48.00	3.6	48.19	4.4	48.36	5.1	48.43	5.4
Griffin Mill Bypass												
RFA_218	48.33	2.3	48.38	2.8	48.48	3.6	48.55	4.4	48.60	5.0	48.64	5.4
Junction with RFO_012												
RFA_219	48.33	4.8	48.38	5.8	48.48	7.4	48.55	8.9	48.60	10.0	48.64	10.7
Griffin Mill Access Bridge												
RFA_220	48.35	4.8	48.41	5.8	48.52	7.4	48.59	8.9	48.65	10.0	48.68	10.7
RFA_221	48.48	4.7	48.54	5.7	48.65	7.4	48.73	8.8	48.79	10.0	48.82	10.7
Griffin Mill Footbridge 2												
RFA_222	48.49	4.7	48.56	5.7	48.66	7.4	48.74	8.8	48.80	10.0	48.84	10.7
Junction with RFP_001												
RFA_223	48.49	4.4	48.56	5.4	48.66	5.9	48.74	6.9	48.80	7.8	48.84	8.3
RFA_224	48.61	4.4	48.68	5.4	48.75	5.9	48.84	6.8	48.90	7.8	48.94	8.3
Brookside Bridge 1												
RFA_225	48.76	4.4	48.85	5.3	48.90	5.9	49.02	6.8	49.12	7.8	49.17	8.3
RFA_226	48.82	4.4	48.91	5.3	48.96	5.9	49.08	6.8	49.18	7.8	49.23	8.3
Ham Lock Footbridge												
RFA_227	48.86	4.4	48.98	5.3	49.04	5.9	49.20	6.8	49.38	7.8	49.47	8.3
RFA_228	48.95	4.4	49.04	5.3	49.10	5.9	49.24	6.8	49.41	7.8	49.48	8.3
Swimming Pool Bridge												
RFA_229	49.16	4.4	49.25	5.3	49.31	5.9	49.44	6.8	49.61	7.8	49.68	8.3
RFA_230	49.52	4.4	49.61	5.2	49.65	5.8	49.74	6.8	49.95	7.8	50.09	8.0

Phoenix Mill Bypass Sluces												
RFA_231	49.93	4.4	49.99	5.2	50.03	5.8	50.09	6.8	50.19	7.7	50.27	8.0
Junction with RFP_006												
RFA_232	49.93	4.9	49.99	5.8	50.03	7.3	50.09	8.8	50.19	9.9	50.27	10.6
RFA_233	50.12	5.0	50.17	5.8	50.23	7.3	50.30	8.7	50.37	9.9	50.43	10.6
Phoenix Estate Access Bridges												
RFA_234	50.22	5.0	50.27	5.8	50.35	7.3	50.43	8.7	50.56	9.9	50.60	10.6
RFA_235	50.38	5.0	50.45	5.8	50.55	7.3	50.65	8.7	50.71	9.9	50.76	10.6
Phoenix Estate Footbridge												
RFA_236	50.44	5.0	50.52	5.8	50.64	7.3	50.74	8.7	50.81	9.9	50.86	10.6
RFA_237	50.59	5.0	50.67	5.8	50.79	7.3	50.90	8.7	50.98	9.9	51.03	10.5
Phoenix Estate Sluces												
RFA_238	51.86	5.0	51.94	5.8	52.05	7.2	52.13	8.7	52.18	9.8	52.21	10.5
RFA_239	51.89	5.0	51.96	5.8	52.08	7.2	52.16	8.7	52.22	9.8	52.25	10.5
Hawker Siddeley Bridge												
RFA_240	51.89	5.0	51.97	5.8	52.08	7.2	52.16	8.7	52.22	9.8	52.25	10.5
RFA_241	51.95	5.0	52.03	5.9	52.15	7.2	52.24	8.6	52.30	9.8	52.33	10.5
Thrupp Caravan Site Bridge												
RFA_242	52.02	5.0	52.12	5.9	52.26	7.2	52.51	8.6	52.91	9.8	53.17	10.5
RFA_243	52.12	4.9	52.21	5.8	52.35	7.2	52.58	8.6	52.95	9.8	53.19	10.5
RFA_244	52.23	4.9	52.31	5.9	52.43	7.2	52.63	8.6	52.97	9.8	53.20	10.5
RFA_245	52.44	4.8	52.52	5.8	52.63	7.2	52.77	8.6	53.03	9.8	53.24	10.5
RFA_246	52.77	4.7	52.85	5.8	52.95	7.2	53.04	8.5	53.19	9.7	53.33	10.5
RFA_247	53.02	4.7	53.11	5.7	53.22	7.1	53.32	8.5	53.41	9.7	53.50	10.4
RFA_248	53.19	4.6	53.28	5.7	53.39	7.1	53.49	8.5	53.58	9.7	53.64	10.4
RFA_249	53.32	4.6	53.41	5.7	53.54	6.6	53.66	7.2	53.77	7.7	53.83	7.9

Brimscombe Mill Pond Outlet												
RFA_260	55.44	4.6	55.55	5.7	55.38	6.6	55.52	7.2	55.58	7.7	55.61	7.9
RFA_261	55.44	4.5	55.55	5.5	55.38	6.6	55.52	7.2	55.59	7.6	55.62	7.9
RFA_262	55.44	4.5	55.55	5.5	55.40	6.6	55.53	7.2	55.60	7.6	55.63	7.9
Brimscombe Mill Chemical Works Culvert												
RFA_263	55.60	4.5	55.85	5.4	56.11	6.6	56.24	7.2	56.34	7.6	56.39	7.8
RFA_264	55.71	4.5	55.94	5.4	56.18	7.1	56.30	8.4	56.38	9.6	56.43	10.3
Brimscombe Hill Bridge												
RFA_265	55.72	4.5	55.94	5.4	56.19	7.1	56.30	8.4	56.39	9.6	56.43	10.3
RFA_266	55.72	4.5	55.93	5.4	56.18	7.1	56.29	8.4	56.37	9.6	56.42	10.3
Burket Bridge (Port Industrial Estate)												
RFA_267	55.78	4.5	55.95	5.4	56.17	7.1	56.27	8.4	56.35	9.6	56.39	10.3
RFA_268	55.89	4.5	56.02	5.4	56.23	7.1	56.33	8.4	56.41	9.5	56.46	10.2
Bensons Culvert												
RFA_259	56.33	4.5	56.45	5.4	56.66	7.0	56.82	8.4	56.96	9.5	57.03	10.2
RFA_260	56.38	4.5	56.50	5.4	56.72	7.0	56.89	8.4	57.03	9.5	57.11	10.2
Bensons Bridge												
RFA_261	56.39	4.5	56.51	5.4	56.73	7.0	56.96	8.4	57.12	9.5	57.21	10.2
RFA_262	56.41	4.5	56.54	5.4	56.76	7.0	56.98	8.3	57.14	9.5	57.23	10.2
Port Industrial Estate Sluices												
RFA_263	56.99	4.5	57.00	5.4	57.06	7.0	57.18	8.3	57.29	9.5	57.37	10.2
Port Industrial Estate Bridge												
RFA_264	57.00	4.5	57.01	5.4	57.11	7.0	57.23	8.3	57.35	9.5	57.44	10.1
RFA_265	57.01	4.5	57.02	5.4	57.14	7.0	57.25	8.3	57.37	9.4	57.46	10.1
RFA_266	57.03	4.4	57.04	5.4	57.18	7.0	57.30	8.3	57.42	9.4	57.51	10.1
RFA_267	57.06	4.4	57.09	5.4	57.23	6.9	57.35	8.2	57.47	9.3	57.55	10.0

RFA_268	57.09	4.4	57.15	5.3	57.29	6.9	57.40	8.2	57.51	9.3	57.59	10.0
RFA_269	57.11	4.4	57.17	5.3	57.29	6.9	57.39	8.2	57.49	9.3	57.56	10.0
RFA_270	57.31	4.4	57.40	5.3	57.54	6.9	57.64	8.2	57.73	9.3	57.78	10.0
RFA_271	57.37	4.4	57.46	5.3	57.60	6.9	57.70	8.2	57.78	9.3	57.84	9.9
Junction with RFQ_001												
RFA_272	57.37	2.3	57.46	3.1	57.60	4.4	57.70	5.5	57.78	6.5	57.84	7.1
RFA_273	57.59	2.3	57.68	3.0	57.80	4.4	57.88	5.5	57.95	6.5	57.98	7.1
RFA_274	58.00	2.2	58.06	2.4	58.15	2.8	58.20	3.2	58.24	3.5	58.26	3.6
RFA_275	58.06	2.2	58.12	2.4	58.20	2.8	58.25	3.2	58.29	3.4	58.31	3.6
Boume Mills Bypass												
RFA_276	58.40	2.2	58.44	2.4	58.49	2.8	58.52	3.2	58.55	3.4	58.56	3.6
Junction with RFQ_004												
RFA_277	58.40	4.4	58.44	5.3	58.49	6.8	58.52	8.1	58.55	9.2	58.56	9.8
RFA_278	58.51	4.4	58.56	5.3	58.63	6.8	58.69	8.1	58.73	9.1	58.76	9.8
RFA_279	58.68	3.6	58.73	4.3	58.82	5.2	58.88	6.2	58.93	7.6	58.97	8.7
RFA_280	58.81	3.6	58.86	4.3	58.94	5.1	58.99	6.2	59.07	7.6	59.12	8.7
Wimberley Mills Weir												
RFA_281	59.84	3.6	59.92	4.3	60.01	5.1	60.08	6.2	60.16	7.6	60.22	8.7
RFA_282	59.86	3.6	59.93	4.2	60.02	5.1	60.10	6.2	60.19	7.6	60.24	8.7
RFA_283	59.87	3.6	59.94	4.2	60.03	5.1	60.11	6.2	60.19	7.6	60.25	8.7
Wimberley Mills Bridge												
RFA_284	59.99	3.6	60.07	4.2	60.16	5.1	60.26	6.2	60.37	7.6	60.45	8.7
RFA_285	60.04	3.6	60.11	4.2	60.20	5.1	60.30	6.2	60.40	7.6	60.47	8.7
RFA_286	60.16	3.6	60.23	4.2	60.30	5.1	60.39	6.2	60.49	7.6	60.55	8.7
Wimberley Mills Culvert 1												
RFA_287	60.60	3.6	60.67	4.2	60.74	5.1	60.84	6.2	60.96	7.6	61.04	8.7

RFA_288	60.61	3.6	60.67	4.2	60.75	5.1	60.85	6.2	60.97	7.6	61.08	8.1
Wimberley Mills Culvert 2												
RFA_289	61.32	3.6	61.47	4.2	61.67	5.0	61.92	6.2	62.20	7.6	62.23	8.1
RFA_290	61.37	3.6	61.51	4.2	61.69	5.0	61.94	6.2	62.22	7.8	62.25	8.7
RFA_291	61.48	3.6	61.59	4.2	61.75	5.0	61.97	6.2	62.24	7.8	62.27	8.7
RFA_292	61.57	3.6	61.68	4.2	61.80	5.0	62.00	6.2	62.25	7.8	62.29	8.7
RFA_293	61.65	3.6	61.73	4.1	61.85	4.9	62.04	6.2	62.28	7.8	62.31	8.6
RFA_294	61.88	3.6	61.92	4.1	62.01	4.9	62.16	6.2	62.36	7.8	62.40	8.6
RFA_295	62.00	3.6	62.05	4.1	62.13	4.9	62.26	6.2	62.44	7.8	62.48	8.6
RFA_296	62.13	3.7	62.18	4.1	62.25	4.9	62.37	6.2	62.53	7.8	62.58	8.6
RFA_297	62.24	3.7	62.29	4.1	62.37	4.8	62.49	6.2	62.63	7.8	62.69	8.6
RFA_298	62.35	3.8	62.39	4.1	62.46	4.8	62.59	6.2	62.73	7.8	62.79	8.6
Junction with RFR_001												
RFA_299	62.35	1.4	62.39	1.5	62.46	1.8	62.59	2.2	62.73	2.6	62.79	2.8
RFA_300	62.93	1.4	62.93	1.5	62.93	1.7	62.93	2.2	62.93	2.6	62.93	2.8
St Marys Mill Canal Control Weir												
RFA_301	63.08	1.4	63.09	1.5	63.12	1.7	63.17	2.2	63.21	2.6	63.23	2.8
RFA_301A	63.08	1.4	63.08	1.5	63.12	1.8	63.17	2.2	63.22	2.7	63.23	2.9
St Marys Mill Bypass Stulcoe												
RFA_302	64.16	1.4	64.19	1.5	64.26	1.8	64.40	2.2	64.54	2.7	64.62	2.9
Junction with RFR_002												
RFA_303	64.16	3.8	64.19	4.1	64.26	4.8	64.40	6.2	64.54	7.9	64.62	8.7
St Marys House Culvert												
RFA_304	64.29	3.8	64.32	4.1	64.40	4.8	64.54	6.2	64.70	7.8	64.78	8.7
RFA_305	64.39	3.8	64.42	4.1	64.50	4.8	64.66	6.2	64.82	7.8	64.90	8.7
Iles Mill Railway Culvert												

RFA_306	64.44	3.8	64.48	4.1	64.56	4.8	64.72	6.2	64.88	7.8	64.96	8.7
RFA_307	64.48	3.8	64.52	4.0	64.60	4.8	64.76	6.2	64.93	7.8	65.01	8.7
Junction with RFS_001												
RFA_308	64.48	2.2	64.52	2.4	64.60	3.0	64.76	4.3	64.93	5.6	65.01	6.3
RFA_309	64.68	2.2	64.70	2.4	64.78	3.0	64.93	4.3	65.08	5.6	65.16	6.3
Iles Mill Bridge												
RFA_310	64.74	2.2	64.77	2.4	64.85	3.0	65.02	4.3	65.33	5.6	65.53	6.3
RFA_311	64.96	2.2	64.98	2.4	65.05	3.0	65.18	4.3	65.40	5.6	65.58	6.3
Junction with RFT_001												
RFA_312	64.96	2.2	64.98	2.4	65.05	3.0	65.18	4.3	65.40	5.6	65.58	6.3
RFA_313	65.16	2.2	65.19	2.4	65.25	3.0	65.38	4.2	65.55	5.6	65.68	6.3
RFA_314	65.64	1.2	65.67	1.3	65.75	1.4	65.88	1.7	65.98	2.0	66.02	2.2
RFA_315	65.81	1.2	65.83	1.2	65.88	1.4	65.98	1.7	66.06	2.0	66.10	2.2
Iles Mill Bypass Upper Weirs												
RFA_316	66.12	1.2	66.13	1.2	66.15	1.4	66.21	1.7	66.26	2.0	66.28	2.2
Junction with RFS_007												
RFA_317	66.12	3.6	66.13	4.0	66.15	4.7	66.21	6.2	66.26	7.8	66.28	8.6
RFA_318	66.17	3.6	66.19	4.0	66.23	4.7	66.32	6.2	66.41	7.8	66.45	8.6
Belvedere Mill Sluices												
RFA_319	68.00	3.5	68.03	4.0	68.07	4.6	68.17	6.2	68.27	7.8	68.31	8.6
RFA_320	68.00	3.4	68.03	4.0	68.07	4.6	68.17	6.2	68.27	7.8	68.31	8.6
Belvedere Mill Bridge												
RFA_321	67.99	3.4	68.02	4.0	68.07	4.6	68.17	6.2	68.28	7.8	68.33	8.6
RFA_322	68.09	3.3	68.14	4.0	68.19	4.6	68.32	6.2	68.44	7.8	68.49	8.6
RFA_323	68.13	3.3	68.19	4.0	68.24	4.6	68.37	6.2	68.49	7.8	68.55	8.6
Chafford Industrial Estate Sluices												

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RFA_344	76.99	3.2	77.07	3.8	77.16	4.5	77.34	6.2	77.49	7.9	77.59	9.0
RFA_345	76.99	3.2	77.07	3.8	77.16	4.5	77.34	6.2	77.49	7.9	77.59	9.0
RFA_346	77.17	3.2	77.23	3.8	77.31	4.5	77.48	6.2	77.62	7.9	77.71	9.0
RFA_347	77.51	3.2	77.57	3.7	77.65	4.5	77.82	6.2	77.95	7.9	78.04	9.0

Harley Lane Bridge

RFA_348	77.79	3.2	77.93	3.7	78.14	4.5	78.70	6.2	79.25	7.9	79.58	9.0
RFA_349	77.82	3.2	77.95	3.7	78.15	4.5	78.70	6.3	79.25	6.9	79.59	7.9
RFA_350	77.89	3.2	78.00	3.7	78.18	4.5	78.70	6.3	79.26	7.0	79.59	7.1
RFA_351	78.03	3.2	78.11	3.7	78.25	4.5	78.72	6.3	79.26	7.0	79.59	7.1
RFA_352	78.10	3.2	78.18	3.7	78.32	4.1	78.75	4.5	79.27	4.8	79.60	5.7
RFA_353	78.18	2.5	78.26	2.5	78.38	2.6	78.76	3.2	79.27	5.2	79.60	6.0
RFA_354	78.20	2.5	78.28	2.6	78.40	2.7	78.77	4.0	79.28	6.2	79.61	7.3
RFA_355	78.25	3.2	78.32	3.7	78.41	4.1	78.78	6.0	79.28	8.0	79.61	9.2
RFA_356	78.43	2.5	78.49	2.8	78.56	3.2	78.86	4.6	79.31	6.2	79.61	7.5

Ashmead Mill Sluices

RFA_357	79.26	2.5	79.31	2.8	79.35	3.1	79.53	4.6	79.70	6.2	79.88	7.5
RFA_358	79.31	3.1	79.35	3.6	79.39	4.0	79.57	6.0	79.73	8.0	79.89	9.4
RFA_359	79.43	3.1	79.49	3.6	79.53	4.0	79.71	6.0	79.87	8.0	80.00	9.4
RFA_360	79.68	3.1	79.73	3.8	79.77	4.0	79.94	6.0	80.09	8.0	80.18	9.4
RFA_361	79.95	3.1	80.00	3.6	80.04	4.0	80.19	6.0	80.32	8.0	80.40	9.4
RFA_362	80.28	3.1	80.32	3.6	80.36	4.0	80.51	6.0	80.63	7.9	80.70	9.3
RFA_363	80.64	3.1	80.69	3.5	80.74	4.0	80.93	5.9	81.10	7.9	81.20	9.3
RFA_364	80.84	3.1	80.89	3.5	80.94	4.0	81.13	5.9	81.30	7.9	81.40	9.3
RFA_365	81.13	3.1	81.19	3.5	81.24	3.9	81.44	5.3	81.60	7.0	81.70	8.2
RFA_366	81.24	3.1	81.30	3.5	81.34	3.9	81.53	5.3	81.69	7.0	81.79	8.2

Bakers Bridge

RFA_367	82.28	3.0	82.39	3.5	82.47	3.9	82.77	5.3	83.08	7.0	83.35	8.2
RFA_368	82.34	3.0	82.45	3.5	82.53	3.9	82.82	5.3	83.13	7.0	83.40	8.2
RFA_369	82.47	1.4	82.59	1.5	82.68	1.5	83.03	1.8	83.39	2.0	83.67	2.2

Bakers Mill Sluices

RFA_370	85.28	1.4	85.30	1.5	85.31	1.5	85.35	1.8	85.40	2.0	85.43	2.2
RFA_371	85.28	1.4	85.30	1.5	85.31	1.5	85.36	1.7	85.40	1.8	85.43	2.0
RFA_372	85.29	1.5	85.31	1.7	85.32	1.8	85.36	1.8	85.41	1.9	85.44	2.0
RFA_373	85.31	1.7	85.33	1.9	85.34	2.1	85.38	2.2	85.42	2.4	85.46	2.9
RFA_374	85.32	3.0	85.35	3.6	85.36	4.1	85.40	4.3	85.44	4.7	85.48	5.6
RFA_375	85.39	3.0	85.42	3.5	85.46	4.0	85.49	4.3	85.53	4.7	85.59	5.6
RFA_376	85.49	3.0	85.53	3.5	85.56	4.0	85.58	4.3	85.61	4.6	85.67	5.6
RFA_377	85.88	3.0	86.01	3.5	86.04	4.0	86.05	4.3	86.07	4.6	86.11	5.6
RFA_378	86.62	2.9	86.66	3.5	86.69	4.0	86.71	4.3	86.73	4.4	86.77	4.6

Puck Mill Culvert

RFA_379	90.78	2.9	91.65	3.5	92.55	4.0	93.01	4.2	93.38	4.4	93.60	4.5
RFA_380	90.80	2.9	91.65	3.5	92.55	4.0	93.01	4.2	93.38	4.4	93.60	4.5
RFA_381	91.04	2.9	91.67	3.5	92.55	4.0	93.02	4.3	93.38	4.5	93.60	4.6
RFA_382	91.32	2.9	91.70	3.5	92.55	4.0	93.02	4.8	93.38	5.2	93.60	5.5
RFA_383	91.34	2.3	91.71	2.3	92.55	3.7	93.02	5.1	93.38	5.7	93.60	5.9
RFA_384	91.38	1.3	91.72	2.0	92.56	3.6	93.02	5.0	93.38	5.7	93.60	5.9
RFA_385	91.42	2.9	91.73	3.9	92.56	5.7	93.02	6.5	93.38	7.1	93.61	7.4
RFA_386	91.57	0.2	91.77	0.8	92.56	2.8	93.02	4.5	93.39	5.2	93.61	5.5
RFA_387	91.65	1.4	91.79	1.4	92.57	2.6	93.03	4.2	93.39	5.1	93.61	5.8
RFA_388	91.96	2.8	92.00	4.0	92.58	5.5	93.03	6.2	93.39	6.3	93.61	6.5
RFA_389	92.50	2.8	92.62	3.9	92.76	6.1	93.08	8.2	93.40	10.4	93.62	11.9
RFO_001	46.61	2.3	46.74	2.9	46.89	3.9	47.12	4.8	47.20	5.5	47.24	5.9

RFO_002	46.62	2.4	46.76	2.9	47.00	3.8	47.14	4.8	47.22	5.6	47.26	6.1
RFO_003	46.69	2.4	46.82	2.9	47.04	3.8	47.18	4.5	47.25	5.0	47.29	5.4
RFO_004	46.79	2.4	46.89	2.9	47.08	3.8	47.21	4.5	47.28	5.0	47.32	5.4
RFO_005	46.86	2.4	46.94	2.9	47.12	3.8	47.23	4.5	47.30	5.0	47.34	5.4
Griffin Mill Footbridge 3												
RFO_006	46.90	2.4	46.97	2.9	47.14	3.8	47.25	4.5	47.33	5.0	47.40	5.4
RFO_007	46.95	2.4	47.02	2.9	47.16	3.8	47.27	4.5	47.34	5.0	47.40	5.4
Griffin Mill Weir 1												
RFO_008	47.56	2.4	47.61	2.9	47.71	3.8	47.77	4.5	47.81	5.0	47.83	5.4
RFO_009	47.57	2.4	47.63	2.9	47.73	3.8	47.79	4.5	47.82	5.0	47.85	5.4
Griffin Mill Culvert												
RFO_010	47.81	2.4	47.87	2.9	48.00	3.8	48.10	4.5	48.17	5.0	48.22	5.4
RFO_011	47.89	2.4	47.94	2.9	48.05	3.8	48.14	4.5	48.21	5.0	48.26	5.4
Griffin Mill Weir 2												
RFO_012	48.33	2.4	48.38	2.9	48.48	3.8	48.55	4.5	48.60	5.0	48.64	5.4
RFP_001	48.49	0.3	48.56	0.4	48.66	1.8	48.74	2.0	48.80	2.2	48.84	2.4
RFP_002	48.49	0.3	48.56	0.4	48.68	1.8	48.76	2.0	48.81	2.2	48.85	2.4
Brookside Bridge 2												
RFP_003	48.49	0.3	48.56	0.4	48.68	1.8	48.76	2.0	48.82	2.2	48.86	2.4
RFP_004	48.49	0.3	48.56	0.4	48.71	1.8	48.78	2.0	48.84	2.2	48.88	2.4
Phoenix Mill Culvert												
RFP_005	49.93	0.3	49.99	0.4	50.03	1.8	50.09	2.0	50.19	2.2	50.27	2.4
RFP_006	49.93	0.5	49.99	0.5	50.03	1.8	50.09	2.0	50.19	2.2	50.27	2.8
RFO_001	57.37	2.1	57.46	2.3	57.60	2.5	57.70	2.6	57.78	2.8	57.84	2.8
RFO_002	57.65	2.1	57.67	2.3	57.73	2.5	57.78	2.6	57.84	2.8	57.88	2.8
Bourne Mills Sluice												

Rfq_003	58.36	2.1	58.40	2.3	58.45	2.5	58.48	2.6	58.51	2.8	58.53	2.8
Rfq_004	58.40	2.2	58.44	2.9	58.49	4.0	58.52	4.9	58.55	5.7	58.56	6.2
RFR_001	62.35	2.4	62.39	2.6	62.46	3.1	62.59	4.0	62.73	5.2	62.79	5.8
St Marys Mill Culvert												
RFR_002	64.16	2.4	64.19	2.6	64.26	3.1	64.40	4.0	64.54	5.2	64.62	5.8
RFS_001	64.48	1.6	64.52	1.6	64.60	1.7	64.76	2.0	64.93	2.2	65.01	2.3
RFS_002	64.55	1.6	64.58	1.6	64.65	1.7	64.79	2.0	64.94	2.2	65.02	2.3
Iles Mill Culvert												
RFS_003	66.09	1.6	66.10	1.6	66.11	1.7	66.14	2.0	66.16	2.2	66.18	2.3
RFS_004	66.08	1.6	66.09	1.6	66.10	1.7	66.13	2.0	66.15	2.2	66.16	2.3
Junction with RFT_003												
RFS_005	66.08	1.6	66.09	1.6	66.10	1.7	66.13	2.0	66.15	2.2	66.16	2.3
RFS_006	66.10	2.5	66.10	2.8	66.12	3.3	66.15	4.5	66.18	5.8	66.19	6.4
RFS_007	66.12	2.4	66.13	2.8	66.15	3.3	66.21	4.5	66.26	5.8	66.28	6.4
RFT_001	64.96	0.0	64.98	0.0	65.05	0.0	65.18	0.0	65.40	0.0	65.58	0.0
RFT_002	64.96	0.0	64.98	0.0	65.05	0.0	65.18	0.0	65.40	0.0	65.58	0.0
Iles Mill Bypass Sluices												
RFT_003	66.08	0.0	66.09	0.0	66.10	0.0	66.13	0.0	66.15	0.0	66.16	0.0
SCB_001	43.84	0.0	43.84	0.0	43.84	0.0	43.84	0.0	43.91	0.0	44.02	0.0
SCB_002	43.84	0.1	43.84	0.1	43.84	0.1	43.84	0.1	43.91	0.4	44.02	1.1
SCB_003	43.84	0.1	43.84	0.1	43.84	0.1	43.84	0.1	43.91	0.4	44.02	1.1
SCB_004	43.84	0.1	43.84	0.1	43.84	0.1	43.84	0.1	43.91	0.4	44.02	1.1
SCB_005	43.84	0.1	43.84	0.1	43.84	0.1	43.84	0.1	43.91	0.4	44.02	1.1
SCB_006	43.84	0.1	43.84	0.1	43.84	0.1	43.84	0.1	43.92	0.1	44.03	0.1
Butterow Mill Canal Bridge												
SCB_007	43.85	0.1	43.85	0.1	43.85	0.1	43.85	0.1	43.92	0.1	44.03	0.1

SCB_008	43.85	0.1	43.85	0.1	43.85	0.1	43.85	0.1	43.92	0.1	44.03	0.1
Bowbridge Lock Weir												
SCB_009	46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1
SCB_010	46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1
SCB_011	46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1
SCB_012	46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1
SCB_013	46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1
SCB_014	46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1
SCB_015	46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1
Griffins Mill Lock Weir												
SCB_016	49.36	0.1	49.36	0.1	49.36	0.1	49.36	0.1	49.36	0.1	49.36	0.1
SCB_017	49.36	0.1	49.36	0.1	49.36	0.1	49.36	0.1	49.36	0.1	49.36	0.1
SCB_018	49.36	0.1	49.36	0.1	49.36	0.1	49.36	0.1	49.36	0.1	49.36	0.1
SCB_019	49.36	0.1	49.36	0.1	49.36	0.1	49.36	0.1	49.36	0.1	49.36	0.1
Ham Lock Weir												
SCB_020	52.03	0.1	52.03	0.1	52.03	0.1	52.03	0.1	52.03	0.1	52.03	0.1
SCB_021	52.03	0.1	52.03	0.1	52.03	0.1	52.03	0.1	52.03	0.1	52.03	0.1
SCB_022	52.03	0.1	52.03	0.1	52.03	0.1	52.03	0.1	52.03	0.1	52.03	0.1
SCB_023	52.03	0.1	52.03	0.1	52.03	0.1	52.03	0.1	52.03	0.1	52.03	0.1
SCB_024	52.76	0.1	52.76	0.1	52.76	0.1	52.76	0.1	52.76	0.1	52.76	0.1
SCC_001	59.71	0.0	59.73	0.0	59.75	0.0	59.76	0.0	59.78	0.0	59.80	0.0
SCC_002	59.72	0.0	59.73	0.0	59.76	0.0	59.78	0.0	59.81	0.1	59.82	0.1
SCC_003	59.73	0.0	59.74	0.0	59.77	0.0	59.80	0.0	59.84	0.1	59.85	0.1
SCC_004	59.73	0.0	59.75	0.0	59.78	0.0	59.81	0.0	59.85	0.1	59.86	0.1
SCC_005	59.73	0.0	59.75	0.0	59.78	0.0	59.81	0.0	59.85	0.1	59.86	0.1
Wimberley Canal Weir												

SCC_006	62.96	0.0	62.98	0.0	63.02	0.0	63.06	0.0	63.09	0.1	63.10	0.1
SCC_007	62.96	0.0	62.98	0.0	63.02	0.0	63.06	0.0	63.09	0.1	63.10	0.1
SCC_008	62.96	0.0	62.98	0.0	63.02	0.0	63.06	0.0	63.09	0.1	63.10	0.1
SCC_009	62.96	0.0	62.98	0.0	63.02	0.0	63.06	0.0	63.09	0.1	63.10	0.1
SCC_010	62.96	0.0	62.98	0.0	63.02	0.0	63.06	0.1	63.09	0.1	63.10	0.1
SCC_011	62.96	0.0	62.98	0.0	63.02	0.0	63.06	0.1	63.09	0.1	63.10	0.1
SCC_012	62.96	0.0	62.98	0.0	63.02	0.0	63.06	0.0	63.09	0.0	63.10	0.0
SCC_013	62.96	0.0	62.98	0.0	63.02	0.0	63.06	0.0	63.09	0.0	63.10	0.0
Iles Mill Canal Culvert												
SCC_014	64.56	0.0	64.57	0.0	64.58	0.0	64.58	0.0	64.58	0.0	64.58	0.0
SCC_015	64.57	0.0	64.54	0.0	64.73	0.0	64.76	0.0	64.77	0.0	64.77	0.0
Iles Lock Weir												
SCC_016	67.34	0.0	67.35	0.0	67.36	0.0	67.37	0.0	67.37	0.0	67.37	0.0
SCC_017	67.34	0.0	67.35	0.0	67.38	0.0	67.40	0.0	67.40	0.0	67.40	0.0
Belvedere Mill Canal Culvert												
SCC_018	70.12	0.0	70.13	0.0	70.15	0.0	70.16	0.0	70.16	0.0	70.16	0.0
SCC_019	70.12	0.0	70.13	0.0	70.16	0.0	70.17	0.0	70.18	0.0	70.18	0.0
Chafford Canal Culvert 1												
SCC_020	70.44	0.0	70.46	0.0	70.49	0.0	70.51	0.0	70.51	0.0	70.51	0.0
SCC_021	70.44	0.0	70.46	0.0	70.50	0.0	70.51	0.0	70.52	0.0	70.52	0.0
Chafford Canal Culvert 2												
SCC_022	71.99	0.0	72.01	0.0	72.04	0.0	72.05	0.0	72.06	0.0	72.06	0.0
SCC_023	71.99	0.0	72.02	0.0	72.10	0.0	72.13	0.0	72.15	0.0	72.15	0.0
Chafford Chairs Canal Culvert												
SCC_024	74.01	0.0	74.04	0.0	74.10	0.0	74.11	0.0	74.12	0.0	74.12	0.0
SCC_025	74.02	0.0	74.12	0.0	74.27	0.0	74.32	0.0	74.34	0.0	74.34	0.0

SCC_026	74.03	0.0	74.15	0.0	74.35	0.0	74.42	0.0	74.44	0.0	74.45	0.0
Clowes Bridge Lock Weir												
SCC_027	76.81	0.0	76.82	0.0	76.84	0.0	76.84	0.0	76.85	0.0	76.85	0.0
SCC_028	76.81	0.0	76.84	0.0	76.91	0.0	76.92	0.0	76.92	0.0	76.93	0.0
SCC_029	76.81	0.0	76.89	0.0	77.03	0.0	77.05	0.0	77.05	0.0	77.05	0.0
SCC_030	76.81	0.0	76.91	0.0	77.05	0.0	77.08	0.0	77.08	0.0	77.09	0.0
SCC_032	79.71	0.0	79.73	0.0	79.77	0.0	79.77	0.0	79.78	0.0	79.78	0.0
SCC_033	79.71	0.0	79.73	0.0	79.77	0.0	79.77	0.0	79.78	0.0	79.78	0.0
SCC_034	79.71	0.0	79.73	0.0	79.77	0.0	79.77	0.0	79.78	0.0	79.78	0.0
SCC_035	79.71	0.0	79.73	0.1	79.77	0.6	79.78	0.7	79.78	0.8	79.78	0.8
SCC_036	79.71	0.0	79.73	0.1	79.78	0.6	79.79	0.7	79.80	0.8	79.80	0.8
SCC_037	79.71	0.0	79.73	0.1	79.78	0.6	79.80	0.7	79.81	0.8	79.81	0.8
SCC_038	79.71	0.0	79.73	0.1	79.79	0.6	79.81	0.7	79.82	0.8	79.83	0.8
SCC_039	79.71	0.0	79.73	0.1	79.83	0.6	79.86	0.7	79.88	0.8	79.88	0.8
SCC_040	79.71	0.0	79.73	0.1	79.85	0.6	79.89	0.7	79.90	0.8	79.91	0.8
SCC_041	79.71	0.0	79.73	0.1	79.86	0.6	79.90	0.7	79.91	0.8	79.92	0.8
SCC_042	79.71	0.0	79.73	0.1	79.88	0.6	79.92	0.7	79.94	0.8	79.95	0.8
SCC_043	79.71	0.0	79.74	0.1	79.92	0.6	79.96	0.7	79.98	0.8	79.99	0.8
SCC_044	79.71	0.0	79.75	0.1	79.96	0.6	80.01	0.7	80.02	0.8	80.03	0.8
SCC_045	79.71	0.0	79.75	0.1	79.99	0.6	80.03	0.7	80.05	0.8	80.06	0.8
SCC_046	79.71	0.0	79.76	0.1	80.00	0.6	80.04	0.7	80.06	0.8	80.07	0.8
Bakers Mill Lower Lock Weir												
SCC_047	82.01	0.0	82.39	0.1	83.11	0.6	83.15	0.7	83.17	0.8	83.17	0.8
SCC_048	82.01	0.0	82.39	0.1	83.11	0.7	83.15	1.3	83.17	1.7	83.17	1.9
SCC_049	82.01	0.0	82.39	0.1	83.11	0.7	83.15	1.3	83.17	1.7	83.17	1.9
SCC_050	82.01	0.0	82.39	0.1	83.11	0.7	83.15	1.3	83.17	1.7	83.17	1.9

Bakara Mill Upper Lock Weir												
SCC_051	84.51	0.0	84.71	0.1	85.25	0.7	85.38	1.3	85.44	1.7	85.47	1.9
SCC_052	84.51	0.0	84.71	0.0	85.25	0.5	85.38	2.3	85.44	3.9	85.47	4.4
SCC_053	84.51	0.0	84.71	0.0	85.25	0.5	85.38	2.3	85.45	3.9	85.48	4.4
SCC_054	84.51	0.0	84.71	0.0	85.25	0.5	85.39	2.3	85.46	3.9	85.49	4.4
SCC_055	84.51	0.0	84.71	0.0	85.25	0.5	85.39	2.3	85.48	3.9	85.51	4.4
SCC_056	84.51	0.0	84.71	0.0	85.25	0.5	85.40	2.3	85.49	3.9	85.53	4.4
SCC_057	84.51	0.0	84.71	0.0	85.25	0.6	85.41	2.3	85.51	3.9	85.54	4.4
Puck Mill Lower Lock Weir												
SCC_058	86.61	0.0	86.61	0.0	87.78	0.6	88.06	2.3	88.27	3.9	88.32	4.4
SCC_059	86.61	0.0	86.61	0.0	87.78	0.6	88.06	2.3	88.27	4.1	88.32	5.4
Puck Mill Upper Lock Weir												
SCC_060	90.40	0.0	90.40	0.0	90.57	0.6	90.82	2.3	91.02	4.1	91.14	5.4
SCC_061	90.40	0.0	90.40	0.0	90.88	0.6	91.63	2.3	91.73	4.1	91.81	5.4
Whitehall Lower Lock Weir												
SCC_062	91.71	0.0	91.71	0.0	92.55	0.6	93.00	2.3	93.36	4.1	93.58	5.4
SCC_063	91.71	0.0	91.71	0.0	92.55	2.3	93.01	2.5	93.38	3.4	93.60	4.4
SCC_064	91.71	0.0	91.71	0.0	92.55	0.5	93.02	1.4	93.38	2.9	93.60	3.7
SCC_065	91.71	0.0	91.71	0.0	92.56	0.4	93.02	1.3	93.38	3.3	93.60	4.0
SCC_066	91.71	0.0	91.71	0.0	92.56	0.2	93.02	1.0	93.38	3.2	93.60	3.8
SCC_067	91.71	0.0	91.71	0.0	92.56	0.1	93.02	1.0	93.39	3.4	93.61	4.0
SCC_068	91.71	0.0	91.71	0.0	92.56	0.1	93.02	1.0	93.39	3.3	93.61	3.9
SCC_069	91.71	0.0	91.71	0.0	92.56	0.0	93.02	0.2	93.39	2.8	93.61	3.4
SCC_070	91.71	0.0	91.71	0.0	92.56	0.0	93.02	0.0	93.39	0.0	93.61	0.0

Cell 130	79.80	0.00	79.80	0.00	79.80	0.00	79.80	0.00	79.80	0.00	79.80	0.00
Cell 131	79.80	0.00	79.80	0.00	79.80	0.00	79.80	0.00	79.80	0.00	79.80	0.00
Cell 132	80.40	0.00	80.40	0.00	80.40	0.00	80.40	0.00	80.40	0.00	80.40	0.00
Cell 133	80.95	0.00	80.95	0.00	80.95	0.00	80.95	0.00	80.95	0.00	81.20	0.25
Cell 134	81.10	0.00	81.10	0.00	81.10	0.00	81.10	0.00	81.10	0.00	81.10	0.00
Cell 135	81.60	0.00	81.60	0.00	81.60	0.00	81.60	0.00	81.60	0.00	81.60	0.00
Cell 137	85.28	2.10	85.30	2.12	85.31	2.13	85.36	2.18	85.40	2.22	85.44	2.26
Cell 138	85.28	2.19	85.30	2.20	85.32	2.22	85.36	2.26	85.41	2.31	85.44	2.34
Cell 139	85.29	1.81	85.31	1.83	85.32	1.84	85.37	1.89	85.42	1.94	85.45	1.97
Cell 140	85.29	1.49	85.31	1.51	85.33	1.52	85.37	1.57	85.42	1.62	85.45	1.66
Cell 141	91.38	0.72	91.71	1.05	92.55	1.89	93.02	2.36	93.38	2.72	93.60	2.94
Cell 142	91.38	0.64	91.72	0.98	92.56	1.82	93.02	2.28	93.38	2.64	93.60	2.86
Cell 143	91.39	0.59	91.72	0.92	92.56	1.76	93.02	2.22	93.38	2.58	93.60	2.80
Cell 144	91.10	0.15	91.72	0.77	92.56	1.61	93.02	2.07	93.38	2.43	93.61	2.65
Cell 145	91.62	0.42	91.79	0.59	92.57	1.37	93.03	1.83	93.39	2.19	93.61	2.41
Cell 146	91.63	0.43	91.79	0.59	92.57	1.37	93.03	1.83	93.39	2.19	93.61	2.41
Cell 147	91.95	0.55	91.98	0.58	92.58	1.18	93.04	1.64	93.39	1.99	93.61	2.21

Section Label	5 Year Event		10 Year Event		25 Year Event		50 Year Event		100 Year Event		150 Year Event	
	Level (mOD)	Flow (m³/s)	Level (mOD)	Flow (m³/s)	Level (mOD)	Flow (m³/s)	Level (mOD)	Flow (m³/s)	Level (mOD)	Flow (m³/s)	Level (mOD)	Flow (m³/s)
NSA_001	31.59	6.7	31.59	8.4	31.59	10.9	31.59	13.0	31.59	14.3	31.59	15.2
Nallsworth Stream Outfall Weir												
NSA_002	34.16	6.7	34.28	8.4	34.43	10.9	34.56	13.0	34.63	14.3	34.69	15.2
NSA_003	34.28	6.7	34.38	8.4	34.52	10.9	34.63	13.0	34.70	14.3	34.74	15.2
NSA_004	34.53	6.7	34.64	8.4	34.78	10.8	34.89	13.0	34.96	14.3	35.00	15.2
Selsley Hill Culvert												
NSA_005	34.98	6.6	35.15	8.4	35.41	10.8	35.65	13.0	35.85	14.3	36.31	15.1
NSA_006	35.01	6.6	35.19	8.4	35.44	10.8	35.68	12.9	35.96	14.3	36.31	15.1
NSA_007	35.06	6.6	35.24	8.4	35.50	10.8	35.74	12.9	36.01	14.3	36.34	15.2
NSA_008	35.05	6.6	35.24	8.4	35.49	10.8	35.73	12.9	36.00	14.3	36.34	15.2
NSA_009	35.13	6.6	35.31	8.4	35.56	10.8	35.79	12.9	36.05	14.3	36.36	15.2
NSA_010	35.16	6.6	35.34	8.4	35.59	10.8	35.82	12.8	36.07	13.3	36.38	14.5
NSA_011	35.19	6.6	35.37	8.3	35.62	10.8	35.84	13.0	36.08	13.6	36.38	14.8
NSA_012	35.21	6.6	35.39	8.3	35.64	10.7	35.86	13.0	36.09	14.5	36.39	15.6
Variable Crested Weir												
NSA_013	35.52	6.6	35.73	8.3	36.01	10.7	36.25	13.0	36.47	14.5	36.73	15.6
Ernold Culvert												
NSA_014	37.33	6.5	37.52	8.3	37.82	10.7	38.12	12.9	38.31	14.4	38.42	15.6
NSA_015	37.54	6.5	37.69	8.2	37.93	10.7	38.20	12.9	38.37	14.4	38.48	15.6
Ernold Bridge												
NSA_016	38.22	6.5	38.44	8.2	38.74	10.7	39.28	12.9	39.71	14.4	40.06	15.6
NSA_017	38.27	6.5	38.48	8.2	38.77	10.6	39.30	12.9	39.72	14.4	40.06	15.6
NSA_018	38.33	6.5	38.54	8.2	38.82	10.6	39.32	12.9	39.73	14.4	40.07	15.6

Car Park Bridge												
NSA_019	38.32	6.5	38.52	8.2	38.79	10.6	39.29	12.9	39.70	14.4	40.04	15.5
NSA_020	38.41	6.5	38.61	8.2	38.88	10.6	39.35	12.9	39.74	14.4	40.08	15.5
NSA_021	38.59	6.5	38.75	8.2	38.97	10.6	39.39	12.9	39.77	14.4	40.10	15.5
NSA_022	39.02	6.4	39.11	8.2	39.22	10.6	39.47	12.9	39.80	14.4	40.12	15.5
Cotswold House Bridge												
NSA_023	39.41	6.4	39.56	8.2	39.72	10.6	39.80	12.8	39.96	14.3	40.21	15.5
NSA_024	39.45	6.4	39.59	8.2	39.75	10.6	39.83	12.8	39.98	14.3	40.21	15.5
New Tynings Footbridge												
NSA_025	39.48	6.4	39.63	8.2	39.81	10.6	39.90	12.8	40.05	14.3	40.28	15.5
NSA_026	39.55	6.4	39.70	8.2	39.87	10.6	39.97	12.8	40.11	14.3	40.32	15.5
NSA_027	39.65	6.4	39.80	8.1	39.97	10.6	40.09	12.8	40.20	14.3	40.37	15.5
The Priory Bridge												
NSA_028	39.84	6.4	40.02	8.1	40.25	10.5	40.42	12.8	40.55	14.3	40.67	15.5
NSA_029	39.87	6.4	40.06	8.1	40.28	10.5	40.46	12.8	40.58	14.3	40.71	15.5
NSA_030	39.83	6.4	40.12	8.1	40.35	10.5	40.53	12.8	40.65	14.3	40.77	15.5
NSA_031	39.97	6.4	40.16	8.1	40.38	10.5	40.56	12.8	40.68	14.3	40.80	15.5
NSA_032	40.00	6.4	40.19	8.1	40.42	10.5	40.60	12.8	40.72	14.3	40.84	15.5
NSA_033	40.05	6.4	40.24	8.1	40.46	10.5	40.63	12.7	40.75	14.3	40.86	15.5
NSA_034	40.10	6.3	40.29	8.1	40.51	10.5	40.68	12.7	40.80	14.3	40.90	15.5
NSA_035	40.17	6.3	40.35	8.1	40.57	10.5	40.75	12.7	40.86	14.3	40.97	15.5
NSA_036	40.21	6.3	40.37	8.1	40.58	10.5	40.74	12.7	40.85	14.2	40.95	15.5
Junction with NSB_001												
NSA_037	40.21	4.2	40.37	5.5	40.58	7.0	40.74	8.5	40.85	9.5	40.95	10.3
Rookmoor Mill Culvert - Right												
NSA_038	42.26	4.2	42.61	5.5	43.35	7.0	44.20	8.5	44.88	9.5	45.49	10.3

Rookmoor Mill Weir										
NSA_039	42.37	4.2	42.68	5.5	43.39	7.0	44.24	8.5	44.92	10.3
Junction with NSB_002										
NSA_040	42.37	6.3	42.68	8.1	43.39	10.5	44.24	12.7	44.92	15.5
NSA_041	42.41	6.3	42.71	8.0	43.40	10.5	44.24	12.8	44.92	15.7
NSA_042	42.42	6.3	42.71	8.0	43.40	10.5	44.24	12.9	44.92	15.9
NSA_043	42.45	6.3	42.73	8.0	43.40	10.5	44.24	13.0	44.92	16.1
NSA_044	42.56	6.3	42.81	8.0	43.42	10.5	44.24	13.1	44.92	16.2
Selsley Road Bridge										
NSA_045	42.61	6.3	42.84	8.0	43.54	10.5	44.34	13.1	44.94	16.3
Selsley Road Weir										
NSA_046	43.13	6.3	43.28	8.0	43.78	10.5	44.50	13.1	45.06	16.4
NSA_047	43.43	6.3	43.55	8.0	43.88	10.5	44.52	13.1	45.07	16.6
Paula Rise Bridge										
NSA_048	43.65	6.2	43.78	8.0	44.03	10.5	44.59	13.1	45.14	16.7
NSA_049	43.73	6.2	43.86	8.0	44.08	10.4	44.60	13.1	45.14	17.0
NSA_050	43.83	6.2	43.96	8.0	44.16	10.4	44.63	13.1	45.16	17.2
NSA_051	43.96	6.2	44.08	8.0	44.26	10.4	44.66	13.1	45.17	17.4
Railway Bridge										
NSA_052	44.09	6.2	44.23	8.0	44.41	10.4	44.75	13.1	45.40	17.5
NSA_053	44.22	6.2	44.37	7.9	44.55	10.4	44.85	13.1	45.43	17.7
The Forge Weir										
NSA_054	44.58	6.2	44.74	7.9	44.94	10.4	45.24	13.1	45.71	17.7
NSA_055	44.66	6.2	44.81	7.9	45.00	10.4	45.28	13.1	45.73	17.8
Birds Crossing										
NSA_056	44.74	6.2	44.89	7.9	45.11	10.4	45.58	13.1	46.12	17.8

NSA_057	44.80	6.2	44.97	7.9	45.20	10.4	45.64	13.1	46.15	15.1	46.44	17.8
NSA_058	44.84	6.2	45.01	7.9	45.23	10.3	45.66	13.1	46.15	15.2	46.44	17.7
NSA_059	44.86	6.1	45.03	7.9	45.25	10.3	45.67	13.1	46.16	15.3	46.45	17.6
NSA_060	44.92	6.1	45.09	7.9	45.31	10.3	45.70	13.1	46.17	15.3	46.45	17.6
NSA_061	45.03	6.1	45.18	7.9	45.39	10.3	45.72	13.1	46.17	15.4	46.45	17.5
Station Road Works												
NSA_062	45.60	6.1	45.75	7.9	46.00	10.3	46.39	13.1	46.80	15.4	47.14	17.5
Station Road Bridge												
NSA_063	46.40	6.1	46.60	7.9	46.86	10.3	47.10	13.1	47.36	15.4	47.62	17.5
NSA_064	46.43	6.1	46.63	7.8	46.87	10.3	47.11	13.1	47.36	15.4	47.62	17.5
South Woodchester Works Bridge												
NSA_065	46.45	6.1	46.76	7.8	47.03	10.3	47.24	13.1	47.45	15.4	47.67	17.5
NSA_066	46.49	6.1	46.79	7.8	47.06	10.3	47.26	13.1	47.47	15.4	47.68	17.6
NSA_067	46.52	6.1	46.82	7.8	47.08	10.3	47.29	13.1	47.49	15.4	47.70	17.6
NSA_068	46.58	6.1	46.85	7.8	47.11	10.2	47.32	13.0	47.52	15.4	47.73	17.6
NSA_069	46.58	6.1	46.86	7.8	47.12	10.2	47.33	13.0	47.52	15.5	47.73	17.7
NSA_070	46.60	6.0	46.88	7.8	47.13	10.2	47.34	13.0	47.53	15.5	47.74	17.8
NSA_071	46.60	6.0	46.88	7.9	47.14	10.2	47.34	13.0	47.53	15.5	47.74	17.8
NSA_072	46.70	6.0	46.94	7.9	47.18	10.2	47.37	13.0	47.55	15.5	47.75	17.9
NSA_073	46.88	6.0	47.09	7.9	47.32	10.2	47.52	13.0	47.70	15.5	47.88	17.9
NSA_074	47.12	6.0	47.25	7.9	47.43	10.2	47.60	13.0	47.76	15.5	47.92	17.8
NSA_075	47.50	6.0	47.63	7.8	47.73	10.2	47.85	13.0	47.95	15.5	48.05	17.8
Frogmarsh Lane Bridge												
NSA_076	48.16	6.0	48.38	7.8	48.70	10.1	49.02	12.9	49.28	15.4	49.48	17.8
NSA_077	48.19	6.0	48.42	7.8	48.74	10.1	49.06	12.9	49.31	15.4	49.52	17.8
Bath Road Bridge												

[illegible]

NSA_088	51.67	1.0	51.78	1.1	51.98	1.2	52.20	1.2	52.51	2.3	53.08	4.0
NSA_089	51.74	1.0	51.82	1.1	51.99	1.2	52.21	1.2	52.52	2.3	53.09	3.8
NSA_100	51.85	1.0	51.90	1.1	52.04	1.1	52.23	1.2	52.56	1.3	53.12	1.3
Dunkirk Mills Culvert												
NSA_101	55.52	1.0	55.64	1.1	55.75	1.1	55.85	1.2	55.96	1.2	56.12	1.3
Junction with NSC_016												
NSA_102	55.52	2.8	55.64	3.9	55.75	5.0	55.85	6.1	55.96	7.3	56.12	9.3
NSA_103	55.52	2.8	55.64	3.9	55.76	5.0	55.86	6.0	55.97	7.3	56.13	9.3
NSA_104	55.54	2.8	55.67	3.9	55.78	5.0	55.88	6.0	55.99	7.3	56.15	9.3
NSA_105	55.59	2.8	55.71	3.9	55.83	5.0	55.93	6.0	56.04	7.3	56.20	9.3
NSA_106	55.70	2.8	55.82	3.8	55.94	5.0	56.04	6.0	56.14	7.3	56.29	9.3
NSA_107	55.77	2.8	55.90	3.8	56.02	4.9	56.12	6.0	56.25	6.6	56.43	7.3
NSA_108	55.84	2.8	55.97	3.8	56.09	5.1	56.19	6.7	56.30	7.8	56.48	8.2
NSA_109	55.91	2.8	56.04	3.8	56.16	5.1	56.26	6.7	56.34	8.2	56.49	8.9
NSA_110	55.95	2.8	56.08	3.8	56.21	5.1	56.33	6.8	56.40	8.6	56.52	9.6
NSA_111	56.02	2.8	56.16	3.8	56.29	5.1	56.43	6.8	56.52	8.6	56.62	9.6
NSA_112	56.09	2.8	56.22	3.8	56.36	5.0	56.51	6.8	56.62	8.6	56.71	9.6
NSA_113	56.13	2.8	56.26	3.8	56.40	5.0	56.55	7.1	56.66	9.3	56.75	10.5
Junction with NSE_001												
NSA_114	56.13	5.1	56.26	6.7	56.40	9.4	56.55	10.8	56.66	11.9	56.75	12.9
NSA_115	56.31	5.1	56.44	6.7	56.61	9.5	56.68	11.7	56.75	13.6	56.81	14.8
NSA_116	56.44	5.1	56.57	6.6	56.75	9.5	56.84	12.1	56.90	14.8	56.93	16.6
NSA_117	56.54	5.1	56.68	6.6	56.87	9.5	56.99	12.1	57.10	14.8	57.16	16.6
NSA_118	56.65	5.1	56.78	6.6	56.96	9.5	57.09	12.1	57.20	14.8	57.29	16.6
Garage Culvert												
NSA_119	56.87	5.0	57.05	6.6	57.63	9.5	58.20	12.1	58.76	14.8	59.14	16.5

NSA_120	56.91	5.0	57.09	6.6	57.64	9.5	58.20	12.1	58.74	14.8	59.13	16.5
NSA_121	57.01	5.0	57.20	6.6	57.72	9.5	58.26	12.1	58.79	14.8	59.15	16.5
Egypt Mill Weir & Wheel												
NSA_122	57.99	5.0	58.08	6.6	58.23	9.4	58.48	12.1	58.94	14.8	59.28	16.6
NSA_124	57.99	5.0	58.08	6.6	58.23	9.5	58.46	12.1	58.92	14.8	59.26	16.6
NSB_001	40.21	2.1	40.37	2.6	40.58	3.4	40.74	4.2	40.85	4.8	40.95	5.2
Rookmoor Mill Culvert - Left												
NSB_002	42.37	2.1	42.68	2.6	43.39	3.4	44.24	4.2	44.92	4.8	45.52	5.2
NSC_001	51.58	4.8	51.69	6.1	51.82	7.2	51.95	8.4	52.15	9.0	52.42	9.1
Crichtleys Left Hand Culvert												
NSC_002	52.61	4.8	52.83	6.1	52.96	7.2	53.08	8.4	53.16	9.0	53.23	9.2
NSC_003	52.63	4.8	52.84	6.1	52.97	7.2	53.09	8.4	53.16	9.0	53.23	9.2
NSC_004	52.69	4.1	52.90	5.2	53.03	6.2	53.15	7.1	53.22	7.6	53.28	7.7
NSC_005	52.76	4.2	52.97	5.2	53.10	6.2	53.22	7.1	53.29	7.5	53.34	7.5
NSC_006	52.79	4.2	52.99	5.6	53.11	7.8	53.22	10.1	53.29	11.4	53.33	12.0
Junction with NSD_001												
NSC_007	52.79	1.8	52.99	2.8	53.11	3.8	53.22	5.0	53.29	6.1	53.33	6.6
Crichtleys Bridge 3												
NSC_008	52.79	1.8	53.00	2.8	53.13	3.8	53.24	5.0	53.31	6.1	53.35	6.6
Crichtleys Bridge 4												
NSC_009	52.80	1.8	53.03	2.8	53.19	3.8	53.34	5.0	53.45	6.1	53.54	6.6
NSC_010	52.81	1.8	53.04	2.8	53.20	3.8	53.36	5.0	53.47	6.1	53.55	6.8
NSC_011	52.82	1.8	53.05	2.8	53.21	3.8	53.37	5.0	53.47	7.1	53.55	9.3
Tennis Court Bridge 2												
NSC_012	52.83	1.8	53.07	2.8	53.23	3.8	53.39	5.0	53.50	7.1	53.59	9.3
NSC_013	52.83	1.8	53.07	2.8	53.23	3.8	53.38	5.0	53.50	7.1	53.58	9.3

NSC_014	52.85	1.8	53.09	2.8	53.25	3.9	53.42	4.9	53.56	6.1	53.67	8.0
Dunkirk Mills Bridge 1												
NSC_016	52.86	1.8	53.10	2.8	53.30	3.9	53.49	4.9	53.68	6.1	53.88	8.0
Dunkirk Mills Side Sluices												
NSC_018	55.52	1.8	55.64	2.8	55.75	3.9	55.85	4.9	55.96	6.1	56.12	8.0
NSD_001	52.79	2.4	52.99	2.8	53.11	4.2	53.22	5.1	53.29	5.4	53.33	5.4
Critchleys Bridge 5												
NSD_002	53.10	2.4	53.28	2.8	53.48	4.2	53.65	5.1	53.72	5.4	53.76	5.4
NSD_003	53.19	2.4	53.32	2.8	53.54	4.1	53.71	5.1	53.77	5.4	53.80	5.4
NSD_004	53.28	2.4	53.40	2.8	53.61	4.1	53.77	5.1	53.83	5.3	53.85	5.4
NSD_005	53.36	2.4	53.46	2.8	53.67	4.1	53.82	5.1	53.88	5.3	53.90	5.4
Tennis Court Bridge 1												
NSD_006	53.41	2.4	53.52	2.8	53.90	4.1	54.14	5.1	54.22	5.3	54.25	5.4
NSD_007	53.53	2.3	53.61	2.8	53.94	4.1	54.16	5.3	54.22	6.3	54.23	6.7
Elm Brook Bridge 1												
NSD_008	53.63	2.3	53.73	2.8	54.26	4.1	54.51	5.3	54.59	6.3	54.81	6.7
NSD_009	53.66	2.3	53.75	2.8	54.27	4.1	54.52	5.3	54.60	6.3	54.62	6.6
The Gabies Bridge												
NSD_010	53.70	2.3	53.91	2.8	54.34	4.1	54.55	5.3	54.63	6.3	54.65	6.6
NSD_011	53.83	2.3	53.99	2.8	54.38	4.1	54.58	5.3	54.66	6.3	54.68	6.6
Dunkirk Mills Entrance Bridge												
NSD_012	54.15	2.3	54.38	2.8	55.13	4.1	55.72	5.3	56.29	6.3	56.47	6.6
NSD_013	54.19	2.3	54.40	2.8	55.13	4.1	55.72	5.3	56.29	6.3	56.47	7.1
NSD_014	54.25	2.3	54.42	2.8	55.13	4.3	55.72	5.6	56.29	6.4	56.47	7.5
NSD_015	54.32	2.3	54.48	2.8	55.14	3.5	55.72	4.0	56.29	5.3	56.47	6.3
NSD_016	54.41	2.3	54.55	2.8	55.15	3.5	55.72	4.2	56.30	4.9	56.48	5.8

NSD_017	54.48	2.3	54.61	2.8	55.16	3.6	55.72	4.3	56.30	4.8	56.48	5.4
NSD_018	54.60	2.3	54.73	2.8	55.20	3.3	55.73	4.0	56.30	4.2	56.48	4.3
Filling Station Culvert												
NSD_019	56.00	2.3	56.16	2.8	56.30	3.3	56.49	4.0	56.63	4.2	56.73	4.3
NSD_021	56.10	2.3	56.24	2.9	56.38	4.5	56.54	5.1	56.66	5.6	56.75	6.1
Junction with NSE_002												
NSD_022	56.10	0.0	56.24	0.0	56.38	0.1	56.54	1.3	56.66	2.9	56.75	3.7
NSD_023	56.10	0.0	56.24	0.0	56.38	0.0	56.55	0.4	56.68	1.2	56.78	1.8
NSD_024	56.10	0.0	56.24	0.0	56.38	0.0	56.55	0.0	56.69	0.0	56.79	0.0
NSE_001	56.13	2.3	56.26	2.9	56.40	4.4	56.55	4.6	56.66	4.7	56.75	4.7
NSE_002	56.10	2.3	56.24	2.9	56.38	4.4	56.54	4.6	56.66	4.8	56.75	4.7

Model Cell	5 Year Event		10 Year Event		25 Year Event		50 Year Event		100 Year Event		150 Year Event	
	Level (mOD)	Depth (m)	Level (mOD)	Depth (m)	Level (mOD)	Depth (m)	Level (mOD)	Depth (m)	Level (mOD)	Depth (m)	Level (mOD)	Depth (m)
Cell 201	35.50	0.00	35.50	0.00	35.50	0.00	35.82	0.32	36.08	0.58	36.38	0.88
Cell 202	54.00	0.00	54.40	0.40	55.13	1.13	55.72	1.72	56.29	2.29	56.47	2.47
Cell 203	55.06	0.06	55.29	0.29	55.63	0.63	55.74	0.74	56.30	1.30	56.48	1.48
Cell 204	55.07	0.07	55.29	0.29	55.84	0.84	55.99	0.99	56.31	1.31	56.49	1.49
Cell 205	55.50	0.25	55.62	0.36	56.32	1.07	56.53	1.28	56.65	1.40	56.74	1.49

Appendix 2

Properties at risk of flooding in the 100 year return period event

3 Barn Court	Upper Frontlode	19 Private	375180	210170	88	855	8.05 Door
4 Barn Court	Upper Frontlode	20 Private	375180	210150	25	887	8.41 Door
The Ship Inn	Upper Frontlode	19 Public House	375100	210230	80	878	8.47 Door
Anchorage	Saif	20 Private	375420	209470	80	857	8.53 Door
Ashbrook	Upper Frontlode	20 Private	375430	209470	102	856	8.57 Door
The Ferns	Upper Frontlode	20 Private	375080	210100	57	893	8.73 Door
Ash Cottage	Upper Frontlode	20 Private	375080	210090	48	894	8.74 Door
The Laurels	Upper Frontlode	19 Private	375100	210250	48	877	8.74 Door
Silverdale Villa	Upper Frontlode	20 Private	375170	210140	80	889	8.749 Door
1 Ivy Terrace	Upper Frontlode	20 Private	375060	210130	24	892	8.83 D.P.C.
The Cottage	Upper Frontlode	20 Private	375120	210150	48	889	8.84 Door
2 Ivy Terrace	Upper Frontlode	20 Private	375070	210140	24	891	8.86 D.P.C.
2 Glebe Cottages	Upper Frontlode	20 Private	375230	210220	20	881	8.87 Door
3 Ivy Terrace	Upper Frontlode	20 Private	375070	210140	21	890	8.88 D.P.C.
1 Glebe Cottages	Upper Frontlode	20 Private	375230	210210	20	890	8.91 D.P.C.
7 Upper Frontlode	Upper Frontlode	20 Private	375130	210150	90	888	8.92 Door
Little Orchard	Upper Frontlode	19 Private	375100	210260	48	878	8.94 Door
3 Glebe Cottages	Upper Frontlode	20 Private	375205	210220	20	882	8.99 Door
Barn Court (1&2)	Upper Frontlode	19 Private	375200	210180	60	884	9.07 Door
Frome House	Upper Frontlode	20 Private	375100	210030	56	896	9.07 Door
5 Canal Row	Upper Frontlode	19 Private	375110	210370	15	869	9.08 Door
1 Canal Row	Upper Frontlode	19 Private	375110	210330	21	873	9.1 Door
Sevendale	Upper Frontlode	19 Private	375160	210320	58	874	9.1 Door
4 Canal Row	Upper Frontlode	19 Private	375110	210360	15	870	9.11 D.P.C.
2 Canal Row	Upper Frontlode	19 Private	375110	210340	21	872	9.15 Door
6 Canal Row	Upper Frontlode	19 Private	375230	210200	64	879	9.18 Door
Galehouse	Upper Frontlode	19 Private	375120	210380	24	868	9.18 Door
3 Canal Row	Upper Frontlode	20 Private	375110	210350	21	871	9.22 Door
Ash Cottage	Upper Frontlode	20 Private	375070	210050	42	885	9.24 D.P.C.
7 Upper Frontlode	Upper Frontlode	20 Private	375180	210260	160	875	9.28 Door
7 Canal Row	Upper Frontlode	19 Private	375120	210360	21	867	9.32 Door
Bank Cottage	Upper Frontlode	20 Private	375160	210410	60	864	9.42 Door
Brooklyn Villa	Upper Frontlode	20 Private	375160	210390	56	865	9.43 Door
Glebe Cottage	Upper Frontlode	20 Private	375240	210240	30	883	9.44 D.P.C.
Trow House (garage)	Upper Frontlode	20 Private	375180	210450	48	862	9.53 Door
Brooklyn	Whitminster	20 Private	376040	208890	72	840	9.57 D.P.C.
Fromeide Cottage	Upper Frontlode	20 Private	375180	210420	25	863	9.58 D.P.C.
Engineers Cottage	Upper Frontlode	20 Private	375120	210410	48	860	9.61 Door
Trow House	Upper Frontlode	20 Private	375140	210470	60	861	9.63 Door
Brookside	Whitminster	20 Private	376050	208880	32	841	9.7 D.P.C.
2 Puckthorn Cottage	Whitminster	20 Private	376290	209220	48	845	9.71 Door
Lock House	Whitminster	20 Private	376290	209230	72	844	9.78 Door
Weak Farm	Whitminster House	20 Private	375130	210430	88	859	9.85 Door
Whitminster House	Whitminster House	20 Farm Building	375700	208990	270	838	9.88 Door
Walk House	Whitminster	19 Private	375940	209080	120	848	9.98 Door
Walk Farm	Whitminster House	20 Farm Building	375730	208920	220	833	10.01 Door
Whitminster House	Whitminster House	17 Private	375700	208990	72	835	10.02 Door
Forest View	Whitminster House	17 Private	375970	209250	540	847	10.03 Door
Weak Cottage (garage)	Whitminster	20 Private	375050	210470	48	858	10.08 Door
Weak Farm	Whitminster	20 Private	376000	208850	30	859	10.14 Door
Weak Cottage	Whitminster	20 Barn	375710	208930	63	834	10.15 Door
Weak Farm	Whitminster	20 Private	376020	208850	80	838	10.15 D.P.C.
Wyattle College Boat Club	Whitminster House	20 Farm Building	375070	208960	78	837	10.24 Door
Junction Bridge House	Whitminster House	20 Industrial	375650	209250	192	852	10.4 Door
Sandfield Bridge House	Whitminster House	20 Private	375630	208350	218	850	10.46 Door
Wharf Cottage	Whitminster	20 Industrial	375800	208230	180	854	10.47 Door
Wharf Cottage	Whitminster	20 Private	375650	208300	72	849	10.66 Door
Wharf House	Whitminster	20 Industrial	375630	208230	48	853	10.71 Door
Wharf House (workshop)	Whitminster	20 Private	375370	209030	104	855	11.18 Door
Fromeide M&I Barn	Whitminster	20 unknown	376970	207270	64	816	11.28 Door
Fromeide M&I	Whitminster	19 Private	377250	207470	42	823	11.34 Door
Wharf House	Whitminster	20 Private	376930	207280	170	815	11.63 Door
Fromeide M&I House	Whitminster	20 Private	377270	207460	60	822	11.69 Door
Church Cottage	Whitminster	19 Private	377290	207475	40	821	11.81 Door
Fromeide Cottages	Whitminster	19 Private	376900	207250	180	814	12.09 Door
Fromeide Cottages	Whitminster	19 Private	376180	209080	64	843	12.48 Door
Fromeide Cottages	Whitminster	19 Empty	376910	207230	50	813	12.66 Door
Fromeide Cottages	Whitminster	19 Empty	376900	207220	38	812	12.81 Door
Fromeide Cottages	Whitminster	19 Empty	376900	207220	48	817	12.85 Door
Fromeide Cottages	Whitminster	19 Empty	376900	207230	32	811	12.88 Door
Canal View	Whitminster	20 Private	376760	208390	80	832	13.1 Door
St Andrew's Church	Whitminster	17 Church	376000	208070	240	846	13.43 Door
Lodge	Whitminster	19 Private	376130	209040	42	842	13.97 Door
Wasp Joinery & Construction	Whitminster	20 Industrial	377620	208120	300	712	14.01 Door
Fromeide Cottages	Whitminster	20 Private	376960	208900	30	791	14.15 Door
Fromeide Cottages	Whitminster	18 Private	376910	207170	36	820	14.37 D.P.C.
K	Whitminster	20 Industrial	377900	208080	375	716	14.44 Door
Fuelbury Gas	Whitminster	20 Commercial	377960	208100	131	710	14.46 Door

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Stroud Sewing Services	Eastington Industrial	Estate	
Spencerian	Eastington Industrial Estate		
Taylor's Alloy	Eastington Industrial Estate		
Unit 12	Eastington Industrial Estate		
1 The Council Depot			
2 The Council Depot			
Gloucester County Council Depot			
Ridgely Windows Ltd			
Gloucester County Council Depot			
Gloucester County Council Depot			
16 Riverside Park	Eastington Indust	Estate	
Brook House			
3 Riverside Park	Eastington		
Fromebridge Cottages (barn)	Churchend		
Fromebridge Cottage	Eastington		
Underwood	Fromebridge		
Manor Cottage	Churchend		
Fendalls Churchend			
2 Riverside Park	Eastington		
20 Riverside Park	Eastington		
2 Millend Row	Millend		
1 Millend Row	Millend		
Elms Barn	Churchend		
1 Riverside Park	Eastington		
12 Riverside Park	Eastington		
18 Riverside Park	Eastington		
12A Riverside Park	Eastington		
18 Riverside Park	Eastington		
3 Millend Row	Millend		
Millend Main	Millend		
7 Riverside Park	Eastington		
5 Millend Row	Millend		
7 Millend Row	Millend		
4 Millend Row	Millend		
St Agnes	Churchend		
11 Riverside Park	Eastington		
6 Millend Row	Millend		
14 Riverside Park	Eastington		
15 Riverside Park	Eastington		
4 Riverside Park	Eastington		
8 Millend Row	Millend		
Churchend Cottages	Churchend		
8 Riverside Park	Eastington		
8 Riverside Park	Eastington		
10 Riverside Park	Eastington		
QueerCuts	Churchend		
8 Riverside Park	Eastington		
9 Millend Row	Millend		
Eastington House Estate	Eastington		
Eastington House Estate	Eastington		
Park Burglar	Churchend		
Eastington House Estate	Eastington		
Brookside House	Millend		
8 Eastington Park Farm	Churchend		
3 Eastington Park Farm	Churchend		
2 Eastington Park Farm	Churchend		
St Mary & All Angels Church	Churchend		
7 Eastington Park Farm	Churchend		
Eastington Primary School	Churchend		
1 Eastington Park Farm	Churchend		
Eastington House Estate	Eastington		
Brookside House (barn)	Millend		
Sandhurst	Whitminster		
Netherlands Farm (barn)	Fromebridge		
4 Eastington Park Farm	Churchend		
Netherlands Farm (barn)	Fromebridge		
5 Eastington Park Farm	Churchend		
Le Ponds	Whitminster		
Eastington House Estate	Eastington		
Morton & Clamore	Fromebridge		
Brookside House (barn) Millend	Fromebridge		
Netherlands Farm (barn)	Fromebridge		
Netherlands Farm (barn)	Fromebridge		
Fromebridge House (barn)	Whitminster		
The Old Lodge	Fromebridge		
Netherlands Farm (barn)	Fromebridge		
Frome Orchard	Fromebridge		
Netherlands Farm House	Fromebridge		
Fromebridge House	Fromebridge		

19 Industrial	377910: 206100	125	714	14.48	Door
20 Industrial	377910: 206100	125	715	14.49	Door
20 Industrial	377940: 206080	375	711	14.59	Door
20 Disused	377990: 206140	2250	709	14.59	Door
20 Private	377926: 206840	35	828	14.63	Door
20 Private	377920: 206830	35	827	14.63	Door
20 Council	377970: 206800	884	826	14.85	Door
20 Industrial	377900: 206110	625	713	14.85	Door
20 Council	377980: 206880	504	824	14.88	Door
20 Council	377680: 206830	204	825	14.91	Door
20 Private	378090: 206790	0	911	14.94	Door
19 Private	378190: 206790	131	741	15.13	Door
20 Private	378090: 206790	0	912	15.16	Door
19 Barn	378900: 207200	40	818	15.2	D.P.C.
19 Private	378910: 207180	42	819	15.26	Door
20 Private	378200: 206820	62	744	15.36	Door
18	378190: 206780	58	742	15.38	Door
20 Private	378190: 206810	75	740	15.4	Door
20 Private	378090: 206790	0	910	15.4	Door
20 Private	378090: 206790	0	913	15.49	Door
20 Private	378100: 206390	37	765	15.51	Door
20 Private	378190: 206370	31	764	15.51	Door
18 Private	378200: 206770	131	743	15.51	Door
20 Private	378090: 206790	0	909	15.52	Door
20 Private	378090: 206790	0	916	15.59	Door
20 Private	378090: 206790	0	915	15.61	Door
20 Private	378090: 206790	0	917	15.62	Door
20 Private	378090: 206790	0	914	15.65	Door
20 Private	378190: 206370	25	768	15.7	Door
19 Empty	378120: 206370	1500	773	15.71	Door
20 Private	378090: 206790	0	921	15.71	Door
20 Private	378190: 206380	50	768	15.71	Door
20 Private	378180: 206350	50	770	15.73	Door
20 Private	378190: 206370	50	767	15.73	Door
20 Private	378170: 206860	75	745	15.74	D.P.C.
20 Private	378090: 206790	0	922	15.78	Door
20 Private	378180: 206350	50	769	15.78	Door
20 Private	378090: 206790	0	918	15.77	Door
20 Private	378090: 206790	0	919	15.78	Door
20 Private	378090: 206790	0	926	15.8	Door
20 Private	378180: 206340	75	771	15.81	Door
19 Private	378120: 206770	50	748	15.82	Door
20 Private	378090: 206790	0	920	15.83	Door
20 Private	378090: 206790	0	924	15.84	Door
20 Private	378090: 206790	0	923	15.87	Door
19 Private	378320: 206780	62	749	15.88	Door
20 Private	378090: 206790	0	925	15.9	Door
20 Private	378170: 206340	62	772	15.93	D.P.C.
19 Private	378070: 206420	100	783	15.95	Door
18 Private	377980: 206320	44	781	16.01	Door
20 Private	378200: 206910	75	746	16.03	Door
19 Private	377970: 206530	112	780	16.08	Door
18 Private	378090: 206370	100	776	16.09	D.P.C.
19 Private	378420: 206700	62	757	16.12	Door
19 Private	378410: 206730	100	754	16.12	Door
19 Private	378390: 206730	75	753	16.34	Door
17 Church	378270: 206770	412	739	16.34	Door
18 Private	378410: 206700	47	758	16.35	Door
20 School	378330: 206710	37	751	16.37	Door
19 Private	378390: 206740	90	752	16.49	Door
19 Private	377980: 206490	760	782	16.51	Door
19 Private	378060: 206390	84	777	16.54	Door
20 Private	378060: 206680	94	829	16.55	Door
20 Commercial	378790: 207250	240	809	16.55	Door
19 Private	378420: 206720	70	755	16.57	Door
20 Commercial	378780: 207240	600	806	16.6	Door
19 Private	378420: 206720	94	756	16.64	Door
20 Private	378980: 206660	48	830	16.67	Door
19 Private	377970: 206510	44	785	16.67	Door
20 Industrial	378470: 206990	108	796	16.78	Door
19 Private	378070: 206400	208	778	16.79	Door
20 Commercial	378740: 207260	96	810	16.84	Door
20 Commercial	378760: 207220	320	807	16.9	Door
19 Private	378680: 207180	58	804	16.93	Door
20 Private	378720: 207180	128	806	16.94	Door
19 Commercial	378650: 207120	144	800	16.94	D.P.C.
19 Private	378720: 207210	172	805	17.09	Door
20 Private	378720: 207160	120	801	17.11	Door

Frombridge House	(barn)	Frombridge	19 Private	378590	207140	80	802	17.12	Door
Frombridge House (barn)	Frombridge	Frombridge	19 Private	378700	207140	48	803	17.34	Door
D	J Cook	Chipmans Platt	20 Commercial	378200	208150	84	703	17.37	Door
Grey Gables	Frombridge	Frombridge	20 Private	378200	208160	100	704	17.57	Door
Morton & Calmore	Frombridge	Frombridge	20 Industrial	378510	206940	728	787	17.58	Door
Electricity Sub Station	Frombridge	Frombridge	20 Industrial	378480	207000	1008	795	17.61	Door
William Morris Camphill Community-Chipmans Platt	Frombridge	Frombridge	20 Sub Station	378550	207100	50	799	17.82	Door
The Bungalow	Frombridge	Frombridge	20 Private	378210	206240	682	702	17.83	Door
Millend House	Frombridge Lane	Frombridge	20 Private	378510	207060	84	798	18.01	Door
Millend	Frombridge	Frombridge	19 Private	378090	206350	75	774	18.19	D.P.C.
Frombridge Cottages	Frombridge	Frombridge	20 Private	378520	206810	48	790	18.23	Door
Engineering Inspection Services	Bonds M3	Frombridge	20 Commercial	378230	205170	200	679	18.29	Door
New Tree Engineering Services	Stonehouse	Frombridge	20 Commercial	378210	205180	487	680	18.31	Door
Coltswood Rug Co	Bonds M3	Stonehouse	20 Commercial	378260	205160	844	677	18.43	Door
Grondies	Bonds M3 Estate	Stonehouse	20 Commercial	378230	205180	200	675	18.52	Door
Cristles	Bonds M3	Stonehouse	20 Industrial	378260	205180	337	678	18.64	Door
Coltswood Laminates	Bonds M3 Est	Stonehouse	20 Commercial	378230	205220	2444	676	18.68	Door
Bonds M3 Cottage	Bonds M3	Stonehouse	19 Private	378250	205170	225	674	18.7	Door
3 Bonds M3 Cottage	Bonds M3	Stonehouse	19 Private	378460	204920	56	800	18.75	Door
Old Bonds M3 Cottage	Bonds M3	Stonehouse	19 Private	378130	205240	54	687	18.85	Door
2 Bonds M3 Cottage	Bonds M3	Stonehouse	19 Private	378470	204920	20	801	18.89	Door
Frombridge Garage	Frombridge	Stonehouse	19 Private	378140	205240	70	686	18.97	Door
1 Bonds M3 Cottage	Bonds M3	Stonehouse	20 Commercial	378880	206710	140	783	19.02	D.P.C.
Bonds M3 End	Bonds M3	Stonehouse	19 Private	378150	205240	70	685	19.03	Door
Bonds M3 Cottages	Bonds M3	Stonehouse	19 Private	378490	204910	45	803	19.04	D.P.C.
Garage	Bonds M3	Stonehouse	19 Private	378480	204920	39	802	19.08	Door
The Lees	Chipmans Platt	Stonehouse	20 Private	378540	204920	84	897	19.12	Door
William Morris Camphill Community-Chipmans Platt	Chipmans Platt	Stonehouse	20 Private	378290	206120	100	705	19.13	Door
Splash Cottage	Frombridge	Stonehouse	20 Private	378160	206260	400	701	19.16	D.P.C.
Morden House	Bonds M3	Stonehouse	19 Private	378870	206720	216	782	19.18	Door
Morden House (garage)	Bonds M3	Stonehouse	19 Private	378410	204870	80	804	19.2	Door
Bonds M3 Cottage	Bonds M3	Stonehouse	19 Private	378520	204890	48	888	19.21	Door
Mul Cottage	Bonds M3	Stonehouse	19 Private	378500	204900	70	889	19.22	Door
Leonard Stanley House	Bonds M3	Stonehouse	19 Private	378480	204830	40	807	19.49	Door
Eastington House Estate	Bonds M3	Stonehouse	19 Private	378500	204830	70	808	19.58	Door
William Morris Camphill Community-Chipmans Platt	Bonds M3	Stonehouse	19 Private	378510	204860	240	905	19.75	Door
William Morris Camphill Community - Chipmans Pt	Eastington	Stonehouse	20 Private	378200	206260	50	700	19.79	D.P.C.
Hilborough	Frombridge	Stonehouse	19 Private	378000	205440	360	784	19.86	Door
1 Chipmans Platt	Frombridge	Stonehouse	20 Private	378210	206270	62	689	19.81	Door
Unit 4	Chipmans Platt	Stonehouse	20 Private	378550	206840	48	794	19.87	Door
M & D Services	Chipmans Platt	Stonehouse	20 Private	378390	206120	75	706	20.06	D.P.C.
Oldbury Lodge	Chipmans Platt	Stonehouse	20 Private	378230	206270	39	888	20.7	D.P.C.
Stonehouse Paper & Bag Co	Chipmans Wharf	Stonehouse	20 Industrial	380050	204670	140	1380	20.756	Door
Stonehouse Paper & Bag Co	Chipmans Wharf	Stonehouse	20 Industrial	378210	205250	54	682	21.07	Door
Cutterbuck Motor Body Specialists	Bridgend	Stonehouse	20 Private	378430	206110	78	708	21.11	Door
The Wheelhouse	Bridgend	Stonehouse	20 Private	380110	204730	360	1374	21.17	Door
West Lodge	Bridgend	Stonehouse	20 Industrial	380070	204700	740	1373	21.33	Door
1 Valley View	Bonds M3 Estate	Stonehouse	19 Commercial	380070	204660	600	1375	21.34	Door
Cutterbuck	Chipmans Platt	Stonehouse	20 Commercial	378240	205230	112	673	21.35	Door
4 Valley View	Chipmans Platt	Stonehouse	20 Private (empty)	378320	206980	50	747	21.37	D.P.C.
3 Valley View	Bridgend	Stonehouse	19 Private	380020	204770	65	1388	21.39	D.P.C.
2 Valley View	Bridgend	Stonehouse	20 Commercial	380100	204650	58	1377	21.42	Door
4 Valley View	Bridgend	Stonehouse	19 Private	380020	204760	60	1371	21.43	D.P.C.
4 Chipmans Platt	Bonds M3, Stonehouse	Stonehouse	19 Private	380020	204760	60	1370	21.46	Door
3 S Engineering	Bonds M3	Stonehouse	19 Private	380020	204770	60	1369	21.49	Door
1 Chipmans Platt	Bonds M3	Stonehouse	20 Private	378260	206310	39	695	21.5	Door
1 Alton Terrace	Bridgend	Stonehouse	20 Commercial	378240	205250	137	681	21.55	Door
3 Alton Terrace	Bridgend	Stonehouse	20 Private	378250	206290	39	694	21.58	Door
5 Alton Terrace	Bridgend	Stonehouse	20 Private	380140	204690	50	1382	21.61	Door
4 Alton Terrace	Bridgend	Stonehouse	20 Private	380130	204680	50	1384	21.81	Door
2 Alton Terrace	Bridgend	Stonehouse	20 Private	380120	204670	50	1387	21.84	Door
Panic Link	Bonds M3	Stonehouse	20 Private	380120	204670	50	1386	21.85	Door
Specialist Plastic Moulders	Bonds M3	Stonehouse	20 Private	380130	204690	50	1385	21.88	Door
Cutterbuck	Bridgend	Stonehouse	20 Commercial	378220	205250	337	684	21.89	Door
Garages	Bridgend	Stonehouse	19 Industrial	380060	204680	100	1379	21.74	Door
D	Bonds M3 Estate	Stonehouse	20 Commercial	380060	204660	126	1376	21.78	Door
Hazel Cottage	Bonds M3 Estate	Stonehouse	20 Commercial	378270	205220	150	671	21.79	Door
Almonds Garden Supplies	Bridgend	Stonehouse	20 Private	380120	204620	50	1388	21.79	D.P.C.
Stonehouse Paper & Bag Co	K Jones	Stonehouse	19 Industrial	380070	204680	36	1378	21.8	Door
6 Chipmans Platt	Almonds	Stonehouse	20 Private	378200	205220	40	775	21.84	Door
K9 Hair Care	Bridgend	Stonehouse	19 Commercial	380060	204690	25	1381	21.91	Door
Bridgend Kennels	Bridgend	Stonehouse	20 Private	378270	206310	58	694	21.98	Door
Bridgend House (west whg)	Bridgend	Stonehouse	20 Industrial	380060	204720	220	1372	22.01	Door
	Bridgend	Stonehouse	20 Private	378270	206320	58	683	22.02	Door
	Bridgend	Stonehouse	20 Commercial	380310	204550	75	1394	22.08	Door
	Bridgend	Stonehouse	19 Kennels	380330	204550	84	1393	22.25	Door
	Bridgend	Stonehouse	19 Private	380270	204560	72	1391	22.4	Door

City Electronics	Bonds Mill	Stonehouse	20 Industrial	379180	205250	1250	683	22.489	Door
Bridgend House (east Wing)	Bridgend		19 Private	380270	204590	68	1382	22.583	D.P.C.
Whinnet Studio	Downon Road	Bridgend	20 Private	380465	204585	70	1810	22.83	D.P.C.
37 Crescent Road	Chigamsa Wharf		20 Private	378400	205080	47	707	22.65	Door
33 Crescent Road	Bridgend		20 Private	380180	204730	78	1412	22.68	D.P.C.
Stones	Bridgend		20 Private	380200	204720	78	1410	22.71	D.P.C.
43 Crescent Road	Bonds Mill Estate	Stonehouse	20 Commercial	379270	205240	30	672	22.72	Door
39 Crescent Road	Bridgend		20 Private	380160	204750	78	1415	22.73	D.P.C.
41 Crescent Road	Bridgend		20 Private	380180	204740	78	1413	22.74	D.P.C.
Whinnet	Downon Road	Bridgend	20 Private	380170	204740	78	1414	22.74	D.P.C.
33 Crescent Road	Bridgend		20 Private	380380	204590	85	1395	22.75	D.P.C.
29 Crescent Road	Bridgend		20 Private	380190	204730	78	1411	22.75	D.P.C.
Brook House (Barn)	Stanley Downon		20 Private	380220	204710	78	1408	22.83	D.P.C.
Brook House	Stanley Downon		20 Private	380200	204730	70	1000	22.84	Door
Eastington Park Farm	Churchend		20 Private	380180	204320	180	1001	22.869	Door
31 Crescent Road	Bridgend		20 Farm	378480	205850	275	759	22.87	Door
27 Crescent Road	Bridgend		20 Private	380310	204710	78	1409	22.88	D.P.C.
23 Crescent Road	Bridgend		20 Private	380230	204700	78	1407	22.99	D.P.C.
Seven Vale T	S	V	20 Private	380230	204690	78	1408	22.99	D.P.C.
23 Crescent Road	Bridgend		20 Private	380220	204650	432	1389	22.99	D.P.C.
Eastington Park Farm	Churchend		20 Farm	380240	204690	78	1405	23	D.P.C.
47 Crescent Road	Bridgend		20 Farm	378490	205820	275	760	23.01	Door
AES Workshop Technical Centre	Bridgend		20 Private	380150	204770	72	1417	23.03	D.P.C.
Eastington Park Farm	Bridgend		20 Commercial	380160	204760	72	1418	23.07	D.P.C.
Eastington Park	Churchend	Stone	20 Commercial	378300	205230	368	870	23.07	Door
21 Crescent Road	Churchend		20 Farm	378490	205820	225	761	23.08	Door
Dridge House	Bridgend		18 Old Peoples Home	378550	205770	200	783	23.1	Door
Graystones	Stanley Downon		20 Private	380250	204690	78	1404	23.16	D.P.C.
Fairfield	Bridgend		20 Private	380180	204310	120	1002	23.18	Door
17 Crescent Road	Upper M3s Industrial Estate	Bridgend	20 Private	380060	204550	114	1387	23.19	Door
Fairview	Stanley Downon		20 Private	380363	204615	78	1612	23.2	Door
19 Crescent Road	Bridgend		20 Private	380190	204310	162	1003	23.21	Door
13 Crescent Road	Upper M3s Industrial Estate	Bridgend	20 Private	380270	204690	78	1402	23.28	D.P.C.
15 Crescent Road	Bridgend		20 Private	380585	204625	60	1811	23.29	Door
13 Crescent Road	Bridgend		20 Private	380260	204690	78	1403	23.31	D.P.C.
1 & 2 The Flats	Bridgend		20 Private	380270	204660	78	1401	23.38	D.P.C.
3 & 4 The Flats	Crescent Road	Bridgend	19 Private	380280	204660	78	1400	23.39	D.P.C.
3 Crescent Close	Bridgend		18 Private	380290	204620	78	1386	23.39	D.P.C.
1 Crescent Close	Bridgend		20 Private	380140	204780	72	1419	23.42	D.P.C.
Brooklyn	Stanley Downon		20 Private	380150	204780	72	1418	23.42	D.P.C.
C.A.M. Services	Bridgend		20 Commercial	380180	204290	102	1004	23.452	Door
9 Crescent Road	Bridgend		20 Private	380280	204610	100	1390	23.46	Door
11 Crescent Road	Bridgend		20 Private	380290	204640	78	1398	23.52	D.P.C.
12 Crescent Road	Bridgend		20 Private	380290	204640	78	1399	23.54	D.P.C.
10 Crescent Road	Bridgend		20 Private	380235	204735	50	1512	23.57	D.P.C.
16 Crescent Road	Bridgend		20 Private	380263	204735	50	1513	23.58	D.P.C.
2 Meadway Road	Bridgend		20 Private	380245	204755	50	1510	23.58	D.P.C.
Nippie	Stanley Downon		20 Private	380315	204725	50	1528	23.59	D.P.C.
20 Haven Avenue	Bridgend		20 Private	380170	204290	102	1005	23.591	Door
14 Crescent Road	Bridgend		20 Private	380315	204715	35	1527	23.6	D.P.C.
18 Haven Avenue	Wharfedale Way	Bridgend	20 Private	380245	204745	50	1511	23.61	D.P.C.
28 Haven Avenue	Bridgend		20 Private	380435	204745	60	1478	23.62	D.P.C.
6 Haven Avenue	Bridgend		20 Private	380345	204725	45	1529	23.63	D.P.C.
4 Wharfedale Way	Bridgend		20 Private	380345	204725	40	1528	23.63	D.P.C.
8 Crescent Road	Bridgend		20 Private	380320	204670	50	1454	23.68	D.P.C.
14 Haven Avenue	Bridgend		20 Private	380395	204735	35	1534	23.68	D.P.C.
3 Meadway Road	Bridgend		20 Private	380320	204650	40	1451	23.68	D.P.C.
13 Haven Avenue	Bridgend		20 Private	380395	204765	40	1480	23.69	D.P.C.
8 Crescent Road	Bridgend		20 Private	380310	204670	50	1453	23.69	D.P.C.
15 Downton Road	Bridgend		20 Private	380365	204725	40	1530	23.7	D.P.C.
1 Wharfedale Way	Bridgend		20 Private	380275	204735	66	1515	23.71	D.P.C.
5 Crescent Close	Bridgend		20 Private	380390	204690	30	1462	23.73	D.P.C.
10 Haven Avenue	Bridgend		20 Private	380350	204650	40	1452	23.74	D.P.C.
2 Crescent Close	Bridgend		20 Private	380385	204735	35	1533	23.74	D.P.C.
7 Meadway Road	Bridgend		20 Private	380340	204630	40	1449	23.74	D.P.C.
27 Haven Avenue	Bridgend		20 Private	380395	204735	35	1535	23.75	D.P.C.
18 Crescent Road	Bridgend		20 Private	380130	204800	78	1420	23.75	D.P.C.
23 Haven Avenue	Bridgend		20 Private	380375	204725	45	1532	23.78	D.P.C.
19 Haven Avenue	Bridgend		20 Private	380330	204630	40	1450	23.77	D.P.C.
17 Haven Avenue	Bridgend		20 Private	380130	204800	60	1421	23.78	D.P.C.
	Bridgend		20 Private	380275	204745	66	1514	23.79	D.P.C.
	Bridgend		20 Private	380340	204690	50	1455	23.8	D.P.C.
	Bridgend		20 Private	380235	204765	70	1509	23.8	D.P.C.
	Bridgend		20 Private	380340	204690	50	1456	23.8	D.P.C.
	Bridgend		20 Private	380370	204690	35	1459	23.8	D.P.C.
	Bridgend		20 Private	380370	204690	35	1460	23.8	D.P.C.

23 Haven Avenue	Bridge	20 Private	380350	204680	35	1457	23.81 D.P.C.	PROF
21 Haven Avenue	Bridge	20 Private	380360	204680	35	1459	23.81 D.P.C.	PROF
15 Haven Avenue	Bridge	20 Private	380380	204680	30	1461	23.82 D.P.C.	
Lusher House	Bridge	20 Private	378100	205300	100	779	23.83 D.P.C.	
3 Wharfedale Way	Bridge	20 Private	380395	204755	35	1479	23.86 D.P.C.	
11 Haven Avenue	Bridge	20 Private	380390	204700	30	1463	23.87 D.P.C.	
9 Haven Avenue	Bridge	20 Private	380400	204700	30	1484	23.87 D.P.C.	
9 Crescent Close	Bridge	20 Private	380120	204810	72	1424	23.87 D.P.C.	
1 Haven Avenue	Bridge	20 Private	380445	204700	42	1468	23.88 D.P.C.	
20 Crescent Road	Bridge	20 Private	380235	204765	60	1508	23.88 D.P.C.	
11 Crescent Close	Bridge	20 Private	380110	204820	72	1425	23.89 D.P.C.	
14 Downon Road	Bridge	20 Private	380350	204630	40	1448	23.9 D.P.C.	
6 Meashway Road	Bridge	20 Private	380315	204745	35	1517	23.91 D.P.C.	
4 Meashway Road	Bridge	20 Private	380315	204735	50	1518	23.93 D.P.C.	
13 Downon Road	Bridge	20 Private	380360	204630	40	1447	23.93 D.P.C.	
3 Haven Avenue	Bridge	20 Private	380435	204705	42	1467	23.97 D.P.C.	
2 Wharfedale Way	Bridge	20 Private	380435	204775	70	1481	23.99 D.P.C.	
7 Haven Avenue	Bridge	20 Private	380455	204755	60	1477	24.01 D.P.C.	
5 Haven Avenue	Bridge	20 Private	380415	204700	42	1465	24.01 D.P.C.	
5 Haven Avenue	Bridge	20 Private	380425	204705	42	1466	24.03 D.P.C.	
Brookfield	Bridge	20 Private	380440	204680	35	1472	24.06 D.P.C.	
11 Downon Road	Bridge	20 Private	380370	204630	40	1445	24.06 D.P.C.	
Torona	Bridge	20 Private	380440	204680	35	1471	24.07 D.P.C.	
12 Downon Road	Bridge	20 Private	380445	204795	60	1484	24.1 D.P.C.	
9 Downon Road	Bridge	20 Private	380370	204630	40	1446	24.1 D.P.C.	
24 Crescent Road	Bridge	20 Private	380390	204630	40	1443	24.1 D.P.C.	
8 Meashway Road	Bridge	20 Private	380215	204775	49	1508	24.1 D.P.C.	
10 Meashway Road	Bridge	20 Private	380315	204755	35	1518	24.1 D.P.C.	
22 Crescent Road	Bridge	20 Private	380315	204785	40	1519	24.11 D.P.C.	
8 Downon Road	Bridge	20 Private	380380	204630	40	1444	24.17 D.P.C.	
D	Bridge	20 Private	380215	204775	49	1507	24.19 D.P.C.	
Antican & Grace Co	Bridge	20 Private	380400	204630	40	1442	24.2 D.P.C.	
6 Wharfedale Way	Bridge	20 Industrial	380600	204670	105	1332	24.22 Door	
5 Meashway Road	Bridge	19 Industrial	380630	204670	438	1333	24.22 Door	
7 Meashway Road	Bridge	20 Private	380435	204795	60	1485	24.22 D.P.C.	
5 Meashway Road	Bridge	20 Private	380275	204765	42	1525	24.23 D.P.C.	
7 Downon Road	Bridge	20 Private	380275	204775	42	1524	24.23 D.P.C.	
C.R. Hollands & Co	Bridge	20 Private	380410	204630	40	1441	24.24 D.P.C.	
9 Wharfedale Way	Bridge	20 Commercial	379240	205250	137	681A	24.25 Door	
9 Wharfedale Way	Bridge	20 Private	380395	204785	50	1483	24.25 D.P.C.	
14 Meashway Road	Bridge	20 Private	380375	204785	45	1488	24.26 D.P.C.	
12 Meashway Road	Bridge	20 Private	380325	204775	40	1521	24.27 D.P.C.	
The Old Fleeces	Bridge	20 Private	380325	204775	45	1520	24.28 D.P.C.	
1 Abbots Way	Bridge	19 Private	380110	204250	243	1011	24.3 Door	
Sharn	Bridge	20 Private	380485	204695	50	1598	24.31 D.P.C.	
Ingleswood	Bridge	20 Private	380455	204705	72	1470	24.31 D.P.C.	
13 Wharfedale Way	Bridge	20 Private	380455	204715	48	1469	24.32 D.P.C.	
The Old Nursery	Bridge	20 Private	380365	204785	45	1489	24.34 D.P.C.	
4 Abbots Way	Bridge	20 Private	380485	204705	130	1597	24.36 D.P.C.	
2 Abbots Way	Bridge	20 Private	380515	204705	40	1601	24.38 D.P.C.	
15 Wharfedale Way	Bridge	20 Private	380505	204705	50	1598	24.38 D.P.C.	
3 Abbots Way	Bridge	20 Private	380505	204705	50	1600	24.38 D.P.C.	
Wastdale Packaging Machines Ltd	Bridge	20 Industrial	380590	204680	150	1329	24.38 Door	
5 Abbots Way	Bridge	20 Private	380515	204705	40	1602	24.39 D.P.C.	
17 Wharfedale Way	Bridge	20 Private	380345	204785	40	1491	24.39 D.P.C.	
2 Downon Road	Bridge	20 Private	380390	204780	35	1474	24.48 D.P.C.	
1 Downon Road	Bridge	20 Private	380440	204670	35	1473	24.48 D.P.C.	
5 Downon Road	Bridge	20 Private	380420	204640	40	1439	24.48 D.P.C.	
6 Downon Road	Bridge	20 Private	380420	204640	40	1440	24.5 D.P.C.	
Wastdale Packaging Ltd	Bridge	20 Industrial	380570	204690	670	1331	24.52 Door	
Pumpford Ltd	Bridge	20 Industrial	380575	204655	1060	1609	24.54 D.P.C.	
9 Abbots Way	Bridge	20 Private	380545	204695	40	1608	24.54 D.P.C.	
11 Meashway Road	Bridge	20 Private	380285	204785	42	1522	24.58 D.P.C.	
9 Meashway Road	Bridge	20 Private	380285	204785	42	1523	24.57 D.P.C.	
3 Downon Road	Bridge	20 Private	380445	204655	40	1475	24.57 D.P.C.	
4 Downon Road	Bridge	20 Private	380435	204815	40	1478	24.6 D.P.C.	
Conroy's	Bridge	20 Private	380495	204725	78	1598	24.61 D.P.C.	
8 Abbots Way	Bridge	20 Private	380545	204705	40	1605	24.61 D.P.C.	
7 Abbots Way	Bridge	20 Private	380545	204715	32	1604	24.61 D.P.C.	
12 Wharfedale Way	Bridge	20 Private	380405	204815	42	1572	24.82 D.P.C.	
10 Abbots Way	Bridge	20 Private	380545	204695	40	1607	24.82 D.P.C.	
11 Abbots Way	Bridge	20 Private	380545	204685	40	1608	24.83 D.P.C.	
16 Meashway Road	Bridge	20 Private	380325	204785	45	1463	24.84 D.P.C.	
8 Abbots Way	Bridge	20 Private	380545	204715	32	1603	24.84 D.P.C.	
Stanley Downon Farm (barn)	Bridge	19 Private	380110	204310	90	1007	24.87 Door	
Stanley Downon	Bridge	20 Private	380325	204785	42	1482	24.7 D.P.C.	
Noral Ltd	Bridge	20 Industrial	380600	204680	130	1330	24.75 Door	
10 Wharfedale Way	Bridge	20 Private	380415	204815	49	1487	24.78 D.P.C.	

8 Wharfedale Way	Stanley Dowton Farm	Stanley Dowton	20 Private	380425	204815	49	1488	24.78 D.P.C.
13 Crescent Close	Stanley Dowton Farm	Stanley Dowton	19 Private	380140	204330	152	1008	24.8 Door
Stanley Dowton Farm (barn)	Stanley Dowton	Stanley Dowton	20 Private	380110	204630	100	1428	24.81 D.P.C.
22 Wharfedale Way	Stanley Dowton Farm (barn)	Stanley Dowton	19 Private	380130	204360	250	1009	24.81 Door
CAS Jack Toolmaking	Upper Mills Industrial Estate	Upper Mills Industrial Estate	19 Private	381020	204340	35	1010	24.82 Door
15 Crescent Close	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380375	204815	42	1587	24.85 D.P.C.
2 Wharfedale Close	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380081	204690	84	1334	24.85 Door
1 Wharfedale Close	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380100	204840	100	1427	24.87 D.P.C.
3 Wharfedale Close	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380505	204745	42	1574	24.92 D.P.C.
39 Wharfedale Way	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380485	204745	42	1573	24.93 D.P.C.
4 Wharfedale Close	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380505	204745	48	1575	24.93 D.P.C.
4 Wharfedale Close	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380205	204785	49	1505	24.95 D.P.C.
37 Wharfedale Way	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380325	204745	48	1577	24.98 D.P.C.
21 Wharfedale Close	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380515	204745	48	1578	24.98 D.P.C.
8 Wharfedale Close	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380205	204785	49	1504	25.04 D.P.C.
23 Wharfedale Close	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380505	204785	42	1591	25.21 D.P.C.
6 Wharfedale Close	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380555	204745	42	1580	25.22 D.P.C.
7 Wharfedale Close	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380505	204785	42	1590	25.23 D.P.C.
9 Wharfedale Close	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380535	204745	48	1578	25.24 D.P.C.
Amican	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380545	204745	63	1579	25.24 D.P.C.
14 Wharfedale Way	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380555	204745	42	1581	25.24 D.P.C.
Stanley Dowton Farm	Upper Mills Industrial Estate	Upper Mills Industrial Estate	18 Industrial	380630	204890	143	1336	25.29 Door
11 Wharfedale Close	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380405	204815	42	1571	25.31 D.P.C.
10 Wharfedale Close	Upper Mills Industrial Estate	Upper Mills Industrial Estate	19 Private	380110	204330	200	1008	25.32 Door
4 Fleace Cottage	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380585	204745	54	1583	25.38 D.P.C.
18 Stanley Mill Cottages	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380575	204745	42	1582	25.38 D.P.C.
1 Fleace Cottage	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380090	204210	40	1012	25.42 Door
3 Fleace Cottage	Upper Mills Industrial Estate	Upper Mills Industrial Estate	18 Private	381155	204355	80	1784	25.42 Door
16 Wharfedale Way	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380090	204230	72	1015	25.45 D.P.C.
21 Wharfedale Way	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380090	204230	77	1013	25.46 Door
23 Wharfedale Way	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380395	204635	42	1570	25.47 D.P.C.
Conwood Veneer Ltd	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380090	204220	40	1014	25.48 Door
24 Wharfedale Way	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380275	204805	42	1484	25.49 D.P.C.
Conall Ltd	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380265	204805	42	1485	25.49 D.P.C.
20 Wharfedale Way	Upper Mills Industrial Estate	Upper Mills Industrial Estate	18 Private	380060	204715	370	1327	25.49 Door
Buck 29	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	381155	204345	63	1783	25.52 Door
17 Stanley M2 Cottages	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380355	204825	42	1568	25.53 D.P.C.
Wayne Precision Engineering	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Industrial	380690	204710	130	1340	25.53 Door
Conwood Veneer Ltd	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Industrial	380650	204730	375	1338	25.53 Door
17 Wharfedale Close	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380385	204825	42	1568	25.54 D.P.C.
Amican Ltd	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380040	204730	375	1337	25.57 Door
3 Nothe A/R	Upper Mills Industrial Estate	Upper Mills Industrial Estate	18 Private	381155	204365	48	1785	25.57 Door
2 The Limes	Upper Mills Industrial Estate	Upper Mills Industrial Estate	19 Private	380640	204710	150	1335	25.57 Door
16 Stanley M2 Cottages	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Industrial	380670	204740	391	1339	25.59 Door
15 Stanley M2 Cottages	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380545	204775	65	1568	25.6 D.P.C.
1 Nothe A/R	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380535	204785	50	1580	25.61 D.P.C.
Marl Industrial Veneer	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Industrial	380870	204690	1175	1341	25.61 Door
34 Wharfedale Way	Upper Mills Industrial Estate	Upper Mills Industrial Estate	18 Private	381315	204475	47	1782	25.62 Door
32 Wharfedale Way	Upper Mills Industrial Estate	Upper Mills Industrial Estate	18 Private	381285	204355	70	1789	25.63 Door
Stanley Cottage	Upper Mills Industrial Estate	Upper Mills Industrial Estate	18 Private	381165	204375	48	1788	25.63 Door
27 Wharfedale Way	Upper Mills Industrial Estate	Upper Mills Industrial Estate	18 Private	381165	204385	48	1787	25.65 Door
25 Wharfedale Way	Upper Mills Industrial Estate	Upper Mills Industrial Estate	19 Private	381315	204465	68	1781	25.7 Door
Empty Building	Upper Mills Industrial Estate	Upper Mills Industrial Estate	19 Industrial	381155	204306	600	1782	25.72 Door
T	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380205	204815	49	1501	25.78 D.P.C.
46 Wharfedale Way	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380205	204815	48	1500	25.77 D.P.C.
44 Wharfedale Way	Upper Mills Industrial Estate	Upper Mills Industrial Estate	19 Private	381285	204385	207	1780	25.78 Door
40 Wharfedale Way	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380245	204805	42	1487	25.78 D.P.C.
42 Wharfedale Way	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380255	204805	42	1486	25.81 D.P.C.
18 Wharfedale Way	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	379300	204250	140	988	25.82 Door
19 Crescent Close	Upper Mills Industrial Estate	Upper Mills Industrial Estate	19 Industrial	380081	204700	150	1328	25.84 Door
17 Crescent Close	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380315	204825	42	1555	25.86 D.P.C.
15 Wharfedale Close	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380315	204825	42	1556	25.88 D.P.C.
21 Wharfedale Close	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380335	204825	42	1558	25.88 D.P.C.
20 Wharfedale Close	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380385	204825	42	1557	25.88 D.P.C.
Alan Webb Printing	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380395	204835	42	1569	25.91 D.P.C.
14 Wharfedale Close	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380110	204860	100	1429	25.92 D.P.C.
2 Crescent Close	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380100	204860	100	1428	25.95 D.P.C.
4 Crescent Close	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380565	204785	42	1587	25.95 D.P.C.
50 Wharfedale Way	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380515	204815	58	1583	25.95 D.P.C.
46 Wharfedale Way	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380515	204815	58	1582	25.95 D.P.C.
8 Wharfedale Way	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	379250	204260	375	665	25.95 Door
8 Crescent Close	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380575	204785	42	1586	25.96 D.P.C.
Roots	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380100	204830	60	1423	25.98 D.P.C.
	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380150	204830	60	1422	25.99 D.P.C.
	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380295	204835	42	1553	26.04 D.P.C.
	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380305	204835	42	1554	26.04 D.P.C.
	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380175	204835	70	1503	26.15 D.P.C.
	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380140	204850	100	1431	26.15 D.P.C.
	Upper Mills Industrial Estate	Upper Mills Industrial Estate	20 Private	380720	204710	749	1343	26.17 D.P.C.

12 Whitfield Close	Bridgeend	20 Private	380585	204785	42 1594	26.16 D.P.C.	
31 Whitfield Way	Bridgeend	20 Private	380225	204815	42 1499	26.16 D.P.C.	
13 Whitfield Close	Bridgeend	20 Private	380575	204785	42 1585	26.19 D.P.C.	
28 Whitfield Way	Bridgeend	20 Private	380235	204815	42 1498	26.19 D.P.C.	
28 Whitfield Way	Bridgeend	20 Private	380355	204835	42 1564	26.2 D.P.C.	
28 Whitfield Way	Bridgeend	20 Private	380355	204825	42 1565	26.21 D.P.C.	
88 Whitfield Way	Bridgeend	20 Private	380185	204835	70 1502	26.23 D.P.C.	
6 Crescent Close	Bridgeend	20 Private	380140	204850	100 1430	26.26 D.P.C.	
19 Whitfield Close	Bridgeend	20 Private	380525	204815	56 1594	26.27 D.P.C.	
18 Whitfield Close	Bridgeend	20 Private	380535	204815	56 1595	26.3 D.P.C.	
52 Whitfield Way	Bridgeend	20 Private	380285	204835	35 1532	26.32 D.P.C.	
54 Whitfield Way	Bridgeend	20 Private	380275	204835	42 1531	26.32 D.P.C.	
56 Whitfield Way	Bridgeend	20 Private	380275	204845	42 1550	26.32 D.P.C.	
58 Whitfield Way	Bridgeend	20 Private	380265	204845	35 1540	26.33 D.P.C.	
Hamman Brothers Ltd	Bridgeend	20 Private	380520	204770	523 1326	26.45 D.P.C.	
41 Selwin Close	Upper Mills Industrial Estate	20 Industrial	381005	204195	78 1772	26.46 D.P.C.	
The Stroud Window Co	Ryeford	20 Industrial	381485	204535	144 1787	26.46 Door	
n		20 Industrial	381435	204575	1300 1789	26.467 Door	PROF
43 Selwin Close	King Stanley	20 Private	381015	204195	105 1771	26.5 Door	PROF
Stanley Upholstery	Ryeford	20 Private	381465	204545	120 1796	26.51 Door	PROF
62 Whitfield Way	Bridgeend	20 Private	380255	204845	42 1547	26.52 D.P.C.	
68 Whitfield Way	Bridgeend	20 Private	380235	204845	42 1545	26.52 D.P.C.	
60 Whitfield Way	Bridgeend	20 Private	380255	204845	42 1548	26.52 D.P.C.	
64 Whitfield Way	Bridgeend	20 Private	380245	204845	42 1546	26.54 D.P.C.	
38 Whitfield Way	Bridgeend	20 Private	380335	204835	42 1559	26.59 D.P.C.	
Mespro Mortessia Ltd	Bonds Mill	20 Industrial	379330	205230	44 664	26.61 Door	
84 Whitfield Way	Bridgeend	20 Private	380185	204855	42 1541	26.64 D.P.C.	
86 Whitfield Way	Bridgeend	20 Private	380195	204855	42 1542	26.64 D.P.C.	
70 Whitfield Way	Bridgeend	20 Private	380225	204855	42 1543	26.66 D.P.C.	
68 Whitfield Way	Bridgeend	20 Private	380225	204845	42 1544	26.68 D.P.C.	
45 Selwin Close	King Stanley	20 Private	381035	204205	105 1770	26.715 Door	
Norman Marshall Ltd	King Stanley	20 Industrial	381335	204435	300 1783	26.72 Door	
Stanley Lodge	King Stanley	18 Private	381255	204325	70 1779	26.74 Door	
Marl Industrial Valves	King Stanley	18 Private	381175	204275	8000 1780	26.75 Door	
Jacobs Cottage	Bridgeend	20 Private	380130	204880	60 1435	26.79 D.P.C.	PROF
n		20 Private	381135	204685	160 1821	26.79 Door	PROF
Norman Marshall Ltd	King Stanley	20 Industrial	381495	204585	200 1800	26.82 Door	
Stanley Engineers	Ryeford	20 Industrial	381380	204445	667 1795	26.83 Door	
Cableways	Ryeford	19 Industrial	381345	204575	160 1821	26.85 Door	
30 Whitfield Way	Bridgeend	20 Industrial	381575	204455	2040 1796	26.853 Door	
22 Crescent Close	Bridgeend	20 Private	380365	204845	42 1563	26.89 D.P.C.	
12 Crescent Close	Bridgeend	20 Private	380110	204890	60 1432	26.89 D.P.C.	
Nashell Cottage	Bridgeend	20 Private	380150	204880	60 1437	26.9 D.P.C.	
a Selwin Close	Bridgeend	18 Private	380040	204910	35 1366	26.9 D.P.C.	
10 Selwin Close	King Stanley	20 Private	381075	204225	106 1767	26.901 Door	
12 Selwin Close	King Stanley	20 Private	381055	204205	105 1768	26.923 Door	
1 The Liffert	King Stanley	20 Private	381045	204205	105 1769	26.938 Door	
20 Crescent Close	King Stanley	19 Private	381275	204355	70 1788	26.95 Door	
John C	Wheeler	20 Private	380120	204890	60 1433	26.95 D.P.C.	PROF
16 Crescent Close	Bridgeend	20 Commercial	381545	204565	250 1803	26.95 Door	
14 Crescent Close	Bridgeend	20 Private	380130	204880	60 1434	26.95 D.P.C.	
10 Crescent Close	Bridgeend	20 Private	380140	204880	60 1436	26.96 D.P.C.	
Engineering & Chemical Supplies	Bridgeend	20 Private	380160	204870	60 1438	26.98 D.P.C.	
Wastecore Packaging Ltd		20 Commercial	380750	204700	375 1344	27.03 D.P.C.	
82 Whitfield Way	Upper Mills Industrial Estate	20 Industrial	380720	204740	360 1342	27.03 D.P.C.	
Unit 45 (3)	Bridgeend	20 Private	380175	204685	42 1540	27.04 D.P.C.	
34 Whitfield Way	Upper Mills Industrial Estate	20 Private	380770	204710	365 1345	27.04 Door	
36 Whitfield Way	Bridgeend	20 Private	380335	204855	42 1561	27.04 D.P.C.	
80 Whitfield Way	Bridgeend	20 Private	380335	204845	42 1560	27.04 D.P.C.	
Stanley Engineers	Ryeford	20 Private	380165	204875	42 1538	27.05 D.P.C.	
Flenwell & Seely Ltd	Ryeford	20 Industrial	381375	204565	160 1820	27.09 Door	
C		20 Industrial	381555	204535	70 1805	27.1 Door	PROF
Marl Industrial Valves	King Stanley	20 Industrial	381525	204535	150 1801	27.12 Door	PROF
72 Whitfield Way	King Stanley	18 Industrial	381205	204355	3000 1781	27.16 Door	
74 Whitfield Way	Bridgeend	20 Private	381085	204225	108 1766	27.205 Door	
Weal & Co	Ryeford	20 Private	380225	204775	63 1535A	27.29 D.P.C.	
Nuthell Cottage	Bridgeend	20 Private	380215	204875	63 1536	27.3 D.P.C.	PROF
Criston Const Ltd	Ryeford	20 Industrial	381565	204525	120 1808	27.31 Door	
The Nutshell	Ryeford	19 Private	380650	204820	50 1365	27.32 D.P.C.	PROF
Unknown Address	Bridgeend	20 Industrial	381525	204565	200 1802	27.34 Door	
C		20 Private	380060	204910	64 1364	27.36 Door	PROF
4 Selwin Close	King Stanley	20 Industrial	380670	204790	96 1350	27.42 Door	
4 Canal Cottage	Ryeford	20 Private	381535	204525	210 1804	27.44 Door	PROF
Abbe Plant Inc Ltd	Ryeford	20 Private	381095	204225	108 1765	27.441 Door	
32 Whitfield Way	Bridgeend	19 Private	381175	204655	100 1830	27.45 Door	
76 Whitfield Way	Bridgeend	20 Commercial	381395	204625	150 1819	27.47 Door	
		20 Private	380335	204855	42 1562	27.5 D.P.C.	
		20 Private	380195	204885	63 1538	27.53 D.P.C.	
		20 Private	380205	204880	63 1537	27.53 D.P.C.	

5 Mill Row	King Stanley	19 Private	381285	204275	78	1778	27.58	Door
18 Mill Row	King Stanley	19 Private	381255	204265	36	1773	27.59	Door
1 Mill Row	King Stanley	19 Private	381255	204265	36	1774	27.61	Door
Beech Cottage	Newtown	20 Private	379010	205660	40	787	27.62	Door
2 Selvin Close	King Stanley	20 Private	381105	204225	70	1764	27.62	Door
2 Mill Row	King Stanley	19 Private	381285	204265	36	1775	27.64	Door
New Inn	Newtown	20 Private	379040	205630	80	788	27.65	Door
3 Canal Cottage	Ryeford	19 Private	381195	204655	60	1829	27.65	Door
3 Mill Row	King Stanley	18 Private	381275	204625	36	1776	27.69	Door
1 Ryeford Lodge	Ryeford	19 Private	381435	204625	50	1822	27.71	Door
4 Mill Row	King Stanley	19 Private	381275	204625	36	1777	27.73	Door
7 Lodge	Newtown	19 Private	379040	205490	80	788	27.74	Door
Horseshoe Cottage	Fromebridge	20 Private	378910	205810	48	789	27.79	Door
Unit 27	Upper Mills Industrial Estate	20 Empty	380840	204710	441	1347	27.81	Door
Unit 47	Upper Mills Industrial Estate	18 Church	379950	205010	450	717	27.81	Door
Valton	King Stanley	20 Empty	380760	204710	492	1346	27.92	D.P.C.
Stonehouse Commercial Offices	Ryeford	18 Industrial	381165	204215	360	1762A	27.96	Door
2 Ryeford Lodge	Ryeford	20 Commercial	381655	204575	80	1809	27.96	Door
John C	Wheeler	18 Private	381445	204635	50	1823	27.99	Door
2 Canal Cottage	Ryeford	20 Commercial	381585	204575	240	1808	28.01	Door
1 Canal Cottage	Ryeford	18 Private	381175	204655	90	1828	28.07	Door
Paul A.	Selvin Ltd	20 Commercial	381375	204605	50	1827	28.07	Door
44-48 Boaks Drive (flats)	Stroud	20 Private	380105	204945	170	1706	28.23	D.P.C.
30 Boaks Drive	Stroud	20 Private	380105	204945	170	1706	28.23	D.P.C.
22 Boaks Drive	Stroud	20 Private	380125	204965	60	1704	28.24	D.P.C.
28 Boaks Drive	Stroud	20 Private	380105	204965	60	1700	28.25	D.P.C.
32-42 Boaks Drive (flats)	Stroud	20 Private	380105	204965	36	1703	28.25	D.P.C.
28 Boaks Drive	Stroud	20 Private	380105	204945	170	1705	28.26	D.P.C.
24 Boaks Drive	Stroud	20 Private	380115	204965	40	1702	28.26	D.P.C.
The Cottage	Stroud	20 Private	380125	204965	36	1701	28.32	D.P.C.
Gardiner Brothers	Stroud	20 Private	380060	204220	72	1016	28.37	Door
Stonehouse Court Hotel	Stroud	20 Commercial	379230	205280	125	689	28.44	Door
Carnegie Picture Coatings	Stroud	20 Hotel	379880	205060	75	735	28.47	D.P.C.
Q	Ryeford	20 Industrial	381725	204565	400	1810	28.51	Door
Double Locks Cottage	Ryeford	20 Commercial	379240	205290	100	669	28.57	Door
Acorn Security Alarms	Bonds Mill	19 Private	381895	204595	60	1854	28.57	Door
Car Servicing Garage	Bonds Estate	20 Commercial	379340	205250	20	688	28.62	Door
Plot 45 Boaks Drive	Stroud	20 Commercial	379220	205300	37	687	28.65	Door
Plot 47 Boaks Drive	Stroud	20 Private	380265	204915	30	1751	28.69	D.P.C.
Plot 38-43 Boaks Drive (flats)	Stroud	20 Private	380235	204825	25	1749	28.69	D.P.C.
Tankard house	Ryeford	18 Private	380295	204915	135	1757	28.7	D.P.C.
Plot 44 Boaks Drive	Stroud	20 Private	381315	204865	200	1826	28.7	Door
Plot 46 Boaks Drive	Stroud	20 Private	380275	204915	30	1752	28.71	D.P.C.
1 Court Farm Mews	Stonehouse	20 Private	380255	204915	25	1750	28.81	D.P.C.
2 Court Farm Mews	Stonehouse	20 Private	379820	205050	75	718	28.84	Door
5 Court Farm Mews	Stonehouse	20 Private	379820	205060	94	719	28.84	Door
4 Court Farm Mews	Stonehouse	20 Private	379840	205090	171	722	28.84	Door
3 Court Farm Mews	Stonehouse	20 Private	379830	205080	62	721	28.84	Door
A	Stonehouse	20 Private	379830	205070	131	720	28.86	Door
John Kilson	Bonds Mill	20 Industrial	379320	205290	400	690	29.03	Door
Plot 24 Boaks Drive	Stroud	20 Commercial	379310	205280	250	689	29.03	Door
18 Boaks Drive	Stroud	20 Private	380135	204985	28	1700	29.06	D.P.C.
Plot 14 Boaks Drive	Stroud	20 Private	380245	204945	72	1748	29.06	D.P.C.
20 Boaks Drive	Stroud	20 Private	380145	204985	28	1708	29.09	D.P.C.
14 Boaks Drive	Stroud	20 Private	380205	204985	72	1738	29.11	D.P.C.
2 & 3 Ryeford house	Ryeford	20 Private	380145	204975	35	1707	29.11	D.P.C.
10 Court Farm Mews	Stonehouse	19 Private	380135	204985	35	1710	29.12	D.P.C.
Plot 25 Boaks Drive	Stroud	18 Private	381335	204665	50	1825	29.13	Door
Plot 13 Boaks Drive	Stroud	19 Private	379810	205120	87	726	29.16	Door
Plot 28 Boaks Drive	Stroud	18 Private	379820	205120	87	727	29.16	Door
Plot 27 Boaks Drive	Stroud	20 Private	380265	204935	32	1753	29.18	D.P.C.
Plot 34 Boaks Drive	Stroud	20 Private	380205	204965	72	1737	29.2	D.P.C.
Plot 37 Boaks Drive	Stroud	20 Private	380265	204945	32	1754	29.21	D.P.C.
Plot 38 Boaks Drive	Stroud	20 Private	380265	204945	32	1755	29.21	D.P.C.
Plot 39 Boaks Drive	Stroud	20 Private	380235	204935	48	1747	29.3	D.P.C.
Plot 33 Boaks Drive	Stroud	20 Private	380295	204935	30	1758	29.43	D.P.C.
8 Court Farm Mews	Stonehouse	20 Private	380305	204935	25	1760	29.44	D.P.C.
Brilliant Joinery Ltd	Bonds Mill	20 Private	380305	204935	25	1761	29.44	D.P.C.
gloucester m	Bonds Mill	19 P	380305	204935	36	1759	29.44	D.P.C.
Plot 28-33 Boaks Drive (Flats)	Stroud	20 Industrial	379830	205120	175	725	29.47	Door
Plot 22 Boaks Drive	Stroud	20 Industrial	379320	205290	400	691	29.52	Door
Stonehouse Court Hotel	Stroud	19 Commercial	379360	205340	1350	692	29.54	Door
The Old Brook house	Stroud	20 Private	381345	204585	40	1817	29.57	Door
Plot 15	Stroud	20 Private	380265	204945	135	1758	29.62	D.P.C.
12 Boaks Drive	Stroud	20 Private	380235	204965	72	1746	29.64	D.P.C.
		20 Hotel	379890	205080	1800	738	29.81	D.P.C.
		18 Private	381235	204215	80	1783A	29.862	Door
		20 Private	380225	204875	72	1739	29.87	D.P.C.
		20 Private	380145	204895	32	1711	29.8	D.P.C.

PROF

Stonehouse

Bonds Estate

Site Services

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Stonehouse

Ryeford

Stroud

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Stroud

6 Court Farm Mews	Stonehouse	19 Private	379940	205120	125	723	29.94	Door
8 Boaks Drive	Stroud	20 Private	380155	204995	45	1713	29.98	D.P.C.
Reverna Cottage	Stratley Down	20 Private	380040	204210	285	1017	29.99	D.P.C.
10 Boaks Drive	Stroud	20 Private	380155	204995	32	1712	29.99	D.P.C.
6 Boaks Drive	Stroud	20 Private	380165	205005	40	1714	29.99	D.P.C.
5 Spring Cottages	Ryeford	19 Private	381345	204595	32	1812	30.01	Door
4 Spring Cottages	Ryeford	19 Private	381345	204595	32	1813	30.01	Door
3 Spring Cottages	Ryeford	19 Private	381355	204605	32	1814	30.04	Door
2 Spring Cottages	Ryeford	19 Private	381355	204605	32	1815	30.05	Door
Stonehouse Court Hotel	Ryeford	20 Hotel	379930	205100	425	737	30.06	Door
1 Spring Cottages	Ryeford	19 Private	381335	204615	32	1816	30.08	Door
Bloomfield House	Stroud	20 Private	380465	204855	64	1762	30.13	Door
Arthur Smiths	Ebbey	20 Commercial	382550	204560	125	617	30.14	Door
Pict 21 Boaks Drive	Stroud	20 Private	380235	204975	72	1745	30.17	D.P.C.
Pict 17	Stroud	20 Private	380215	204995	56	1741	30.25	D.P.C.
Pict 16	Stroud	20 Private	380215	204995	56	1740	30.25	D.P.C.
Unknown Address	Stroud	20 empty	380700	204800	100	1349	30.27	D.P.C.
Berlan Construction Ltd	Ebbey	20 Commercial	382520	204530	50	619	30.29	Door
Arthur Smiths	Stroud	19 Commercial	382560	204550	469	618	30.33	Door
Pict 20	Stroud	20 Private	380245	204985	72	1744	30.37	D.P.C.
Frontside Cottage	Stroud	20 Private	382540	204560	100	613	30.38	Door
Court Garden	Stroud	20 Private	379870	205110	131	733	30.48	Door
7 Barlow Close	Stroud	20 Private	380095	205045	72	1720	30.56	D.P.C.
Stroudwater Cottage	Stroud	19 Private	379870	205170	62	729	30.57	Door
Berlan Construction Ltd	Ebbey	20 Commercial	382540	204520	75	620	30.58	Door
Brookfield	Ebbey	19 Private	382540	204580	62	614	30.59	Door
Ryford Building Contractors	Stroud	18 Commercial	381325	204555	30	1811	30.6	Door
Little Court	Stroud	19 Private	379890	205180	100	730	30.6	Door
3 Barlow Close	Stroud	20 Private	380125	205035	90	1718	30.61	D.P.C.
7 Bristol Road	Stroud	20 Private	380410	204910	75	1763	30.61	Door
17 Barlow Close	Stroud	20 Private	380045	205065	72	1727	30.64	D.P.C.
Pict 19	Stroud	20 Private	380225	205005	90	1743	30.69	D.P.C.
Pict 18	Stroud	20 Private	380225	205005	96	1742	30.7	D.P.C.
Unknown Address	Stroud	20 empty	380870	204810	64	1348	30.72	D.P.C.
1 Barlow Close	Stroud	20 Private	380125	205045	72	1717	30.73	D.P.C.
Barn	Stroud	19 Unknown	379890	205140	150	731	30.73	Door
Address Unknown	Stroud	19 Private	379890	205120	187	732	30.74	Door
5 Barlow Close	Stroud	20 Private	380115	205005	70	1719	30.75	D.P.C.
Waters Edge	Ebbey	20 Private	382480	204550	112	612	30.75	Door
Stonehouse Court Hotel	Stroud	20 Hotel	379940	205090	300	738	30.78	Door
2 Barlow Close	Stroud	20 Private	380115	205075	80	1723	30.78	D.P.C.
Westward Motors	Ebbey	18 Commercial	382580	204560	169	616	30.78	Door
4 Boaks Drive	Stroud	20 Private	380135	205025	95	1715	30.81	D.P.C.
2 Boaks Drive	Stroud	20 Private	380135	205025	85	1716	30.81	D.P.C.
Pict 2 Barlow Close (Show Home)	Stroud	20 Eventually Pk	380155	205065	63	1736	30.82	D.P.C.
15 Barlow Close	Stroud	20 Private	380055	205065	72	1728	30.84	D.P.C.
Canal Cottage	Ryeford	19 Private	381465	204645	55	1841	30.88	Door
Westward Motors	Ebbey	20 Commercial	382600	204550	47	615	30.9	Door
9 Barlow Close	Stroud	20 Private	380085	205055	85	1721	30.94	D.P.C.
Court Lawn	Stroud	20 Private	380075	205105	72	1731	30.99	D.P.C.
14 Barlow Close	Stroud	20 Private	379870	205080	169	734	31.03	D.P.C.
Booming Cottage	Ryeford	19 Private	381455	204635	60	1842	31.03	Door
20 Barlow Close	Stroud	20 Private	380075	205115	72	1732	31.06	D.P.C.
11 Barlow Close	Stroud	20 Private	380065	205095	72	1728	31.07	D.P.C.
1 Ryeford House	Stroud	20 Private	380075	205055	75	1722	31.08	D.P.C.
1 Canal Side Cottage	Ryeford	19 Private	381335	204675	65	1824	31.1	Door
1 Ryeford Cottage	Ryeford	19 Private	381475	204645	50	1840	31.1	Door
12 Barlow Close	Stroud	18 Private	381445	204635	50	1843	31.11	Door
18 Barlow Close	Stroud	20 Private	380065	205065	65	1725	31.12	D.P.C.
4 Barlow Close	Stroud	20 Private	380075	205085	72	1729	31.12	D.P.C.
Bridge House (Gate House)	Stroud	19 Private	380105	205075	72	1724	31.12	D.P.C.
10 Barlow Close	Stroud	20 Private	382600	204570	37	621	31.15	Door
Stroud District Council Offices	Ebbey	18 Offices	380065	205125	72	1733	31.28	D.P.C.
6 Barlow Close, Stroud	Stroud	20 Private	382900	204570	94	564	31.33	Door
3 Holly Tree Garden	Stroud	20 Private	380105	204995	72	1735	31.38	D.P.C.
1 Holly Tree Garden	Ebbey	20 Private	382530	204610	75	610	31.38	Door
16 Barlow Close	Ebbey	20 Private	382550	204610	75	608	31.4	Door
2 Holly Tree Garden	Ebbey	20 Private	380065	205065	72	1730	31.41	D.P.C.
8 Barlow Close	Stroud	20 Private	382540	204610	75	609	31.42	Door
Glenways	Stroud	20 Private	380115	205105	72	1734	31.51	D.P.C.
Stroud District Council Offices	Ebbey	19 Industrial	382910	204610	2175	562	31.7	Door
9 Court Farm Mews	Stroud	18 Offices	382970	204610	1681	565	31.92	Door
Bridge House	Stroud	19 Private	379830	205120	175	726	32.44	Door
7 Court Farm Mews	Ebbey	20 Private	382800	204610	169	622	32.46	Door
Ebbey Tyre & Auto Services	Stroud	19 Private	379840	205120	125	724	32.549	Door
Meadow Lodge	Stroud	20 Commercial	382970	204670	225	555	32.61	Door
Ebbey Tyre & Auto Services	Ebbey	19 Private	382860	204520	56	566	32.69	Door
Ebbey Tyre & Auto Services	Stroud	20 Commercial	382970	204670	137	554	32.71	Door
	Stroud	20 Commercial	382960	204650	475	556	32.8	Door

Mazda Motor House	Stroud	20 Commercial	382920	204700	1044	552	32.81	Door
Mazda Motor House	Stroud	20 Commercial	382900	204700	131	561	32.87	Door
1 Gladhree Gardens	Dudbridge	19 Private	383440	204800	71	1238	32.95	Door
5 Gladhree Gardens	Dudbridge	19 Private	383420	204760	42	1236	32.96	Door
4 Gladhree Gardens	Dudbridge	19 Private	383420	204760	30	1237	32.97	Door
7 Gladhree Gardens	Dudbridge	19 Private	383440	204760	71	1239	32.97	Door
6 Gladhree Gardens	Dudbridge	19 Private	383420	204760	32	1235	33.02	Door
Greenways	Ebbey	20 Industrial	382930	204660	47	1234	33.03	Door
3 Gladhree Gardens	Dudbridge	19 Private	383440	204780	50	1240	33.05	Door
10 Gladhree Gardens	Stroud	20 Commercial	382910	204650	90	1242	33.16	Door
Greenways	Ebbey	20 Commercial	382920	204650	562	537	33.19	Door
Tamwood Building Supplies	Stroud	20 Commercial	382910	204650	562	537	33.23	Door
Holy Tree House	Ebbey	20 Commercial	382920	204660	87	604	33.27	Door
11 Gladhree Gardens	Stroud	19 Private	382510	204610	125	611	33.3	Door
Stroud Plant Hire	Stroud	20 Commercial	383460	204770	40	1241	33.32	Door
Hoopers of Ebbey	Stroud	20 Commercial	383490	204810	150	1101	33.35	Door
32 Frome Gardens	Stroud	20 Commercial	382460	204650	262	631	33.37	Door
33 Frome Gardens	Stroud	20 Private	383060	204700	68	1304	33.38	D.P.C.
7 Frome Gardens	Stroud	20 Private	383050	204680	66	1305	33.39	D.P.C.
Bridge Road Motors	Ebbey	20 Private	383240	204770	60	1278	33.41	D.P.C.
2 Frome Gardens	Stroud	20 Commercial	382590	204650	112	603	33.43	Door
3 Frome Gardens	Stroud	20 Private	383270	204780	54	1274	33.45	D.P.C.
Stroud Plant Hire	Stroud	20 Private	383260	204780	54	1275	33.46	D.P.C.
30 Frome Gardens	Stroud	20 Commercial	383450	204800	119	1102	33.48	Door
4 Frome Gardens	Stroud	20 Private	383080	204700	78	1302	33.51	D.P.C.
1 Baytree Cottage	Stroud	20 Private	383060	204780	68	1278	33.52	D.P.C.
31 Frome Gardens	Stroud	19 empty	383480	204690	28	1244	33.55	Door
6 Frome Gardens	Stroud	20 Private	383070	204700	78	1303	33.55	D.P.C.
1 Baytree House	Stroud	20 Private	383240	204770	54	1278	33.56	D.P.C.
1 Baytree House	Stroud	19 Empty	383470	204690	45	1248	33.56	Door
Ebbey Training School	Stroud	20 Commercial	382870	204050	225	558	33.59	Door
34 Frome Gardens	Stroud	20 Private	383060	204690	72	1306	33.59	D.P.C.
5 Frome Gardens	Stroud	20 Private	383250	204780	68	1277	33.6	D.P.C.
1 Frome Gardens	Stroud	20 Private	383280	204790	83	1273	33.61	D.P.C.
2 Baytree House	Stroud	19 empty	383470	204680	100	1245	33.62	Door
The Bungalow	Ryecliff	20 Private	381485	204635	70	1844	33.63	Door
2 Baytree Cottage	Stroud	19 empty	383480	204690	21	1243	33.63	Door
Vale House	Stroud	19 empty	383460	204670	40	1247	33.63	Door
Ebbey Coach Services	Dudbridge	20 Commercial	383460	204510	774	1228	33.66	Door
187 Westward Road	Ebbey	20 Private	382840	204690	62	582	33.71	Door
Kenneth's garden Center	Ebbey Rd	20 Commercial	381525	204635	250	1839	33.72	Door
Redlar	Dudbridge	20 Commercial	383540	204840	2080	1097	33.75	Door
Ebbey Coach Services	Dudbridge	20 Commercial	383480	204530	2160	1229	33.79	Door
9 Frome Gardens	Stroud	20 Private	383220	204760	60	1281	33.84	D.P.C.
8 Frome Gardens	Stroud	20 Private	383230	204760	60	1280	33.88	D.P.C.
Jay Dee Plant Sales Ltd	Ebbey	20 Commercial	382510	204670	94	623	33.94	Door
Lower Dudbridge House	Stroud	19 Private	383550	204510	204	1221	33.96	Window
Woodway	Ebbey	20 Commercial	382880	204700	200	560	33.98	Door
Stroud Plant Hire	Stroud	20 Commercial	383510	204820	671	1099	33.98	Door
28 Frome Gardens	Stroud	20 Private	383080	204700	54	1300	33.98	D.P.C.
Redlar	Stroud	20 Industrial	383560	204700	7005	1084	34	Door
Mina Fishers	Dudbridge	20 Industrial	383570	204490	114	1223	34	Door
33 Frome gardens	Stroud	20 Private	383040	204710	98	1309	34.02	D.P.C.
Lewis & Hole	Dudbridge	19 Industrial	383490	204550	2979	1233	34.03	Door
28 Frome Gardens	Stroud	20 Private	383090	204700	54	1301	34.03	D.P.C.
Jay Dee Plant Sales Ltd	Ebbey	20 Commercial	382470	204670	537	625	34.07	Door
305 Westward Road	Ebbey	20 Commercial	382460	204660	25	629	34.1	Door
Kimring M3 Cottage	Dudbridge	19 Private	383490	204480	65	1226	34.12	Door
4 Park View	Dudbridge	19 Private	383490	204470	60	1225	34.17	Door
11 Frome Gardens	Stroud	20 Private	383210	204760	60	1283	34.2	D.P.C.
Redlar	Dudbridge	20 Industrial	383510	204790	195	1100	34.22	Door
Mazda Motor House	Stroud	20 Private	383210	204760	60	1282	34.22	D.P.C.
Redlar	Stroud	20 Commercial	382920	204710	86	551	34.23	Door
213 Westward Road	Stroud	20 Industrial	383580	204780	1540	1085	34.24	Door
11 Bridge-Side	Ebbey	19 Private	382800	204730	37	578	34.24	Door
10 Bridge-Side	Ebbey	20 Private	383490	204880	38	1084	34.26	Door
9 Bridge-Side	Stroud	19 Private	382570	204690	62	600	34.26	Door
12 Bridge-Side	Stroud	20 Private	383500	204880	36	1063	34.26	Door
13 Bridge-Side	Stroud	20 Commercial	382960	204690	344	559	34.27	D.P.C.
3 Gladhrees	Stroud	20 Private	383500	204880	38	1082	34.27	Door
303 Westward Road	Ebbey	20 Private	383490	204880	38	1065	34.28	Door
14 Bridge-Side	Ebbey	19 Private	382560	204690	72	602	34.3	Door
2 Gladhrees	Stroud	20 Private	382460	204670	20	628	34.32	Door
Stroud Metal Co	Ebbey	19 Private	383480	204870	38	1067	34.32	Door
Jay Dee Plant Sales Ltd	Ltd	20 Industrial	383580	204690	62	601	34.33	Door
Stroud Metal Co	Ebbey	20 Commercial	383510	204790	2623	1080	34.34	Door
Jay Dee Plant Sales Ltd	Stroud	20 Commercial	382490	204650	225	624	34.36	Door
Stroud Metal Co	Ltd	20 Industrial	383610	204760	600	1081	34.47	Door

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Thermoline Eng	Co	Stroud	20 Industrial	383820	204740	550	1082	34.52 Door	PROF
Enviro Technology	Stroud		20 Industrial	383840	204850	384	1070	34.52 Door	PROF
28 Frome Gardens	Stroud		20 Private	383100	204710	68	1298	34.53 D.P.C.	
Orchard Cars	Dudbridge		20 Commercial	383820	204500	100	1218	34.54 Door	
25 Frome Gardens	Stroud		20 Private	383110	204710	84	1297	34.54 D.P.C.	
24 Frome Gardens	Stroud		20 Private	383120	204710	68	1296	34.54 D.P.C.	
27 Frome Gardens	Stroud		20 Private	383100	204710	54	1299	34.55 D.P.C.	PROF
The Copeland Chatterton Co Ltd	Stroud		20 Industrial	383100	204760	45	1078	34.55 Door	
Hoopers of Ebberly	Dudbridge		19 empty	382430	204660	187	632	34.56 Door	
Kimmins Ltd	Ebberly		19 empty	382440	204500	223	1227	34.56 Door	
307 Westward Road	T		19 Guest House	382440	204670	100	630	34.6 D.P.C.	
A	Stroud		20 Commercial	383600	204490	432	1220	34.61 D.P.C.	
Ringwood	Stroud		20 Private	383340	204550	80	1257	34.62 D.P.C.	PROF
The Copeland Chatterton Co Ltd	Stroud		20 Industrial	383750	204850	5825	1075	34.65 Door	
8 Bridge Side	Stroud		20 Private	383510	204880	36	1081	34.67 Door	
7 Bridge Side	Stroud		20 Private	383510	204880	36	1080	34.68 Door	PROF
The Copeland Chatterton Co	Stroud		20 Private	383510	204880	36	1058	34.68 Door	
5 Bridge Side	Stroud		20 Private	383510	204880	36	1058	34.68 Door	
6 Bridge Side	Stroud		20 Private	383510	204880	36	1058	34.68 Door	
Mitvale	Stroud		20 Industrial	383540	204480	378	1222	34.68 Door	
Chosen View	Ebberly		20 Private	383630	204200	60	1018	34.72 D.P.C.	
2 Bridge Road	T		19 Private	382350	204780	25	608	34.73 Door	
A	Stroud		20 Commercial	3831800	204520	153	1218	34.74 Door	PROF
The Copeland Chatterton Co Ltd	Ebberly		20 Industrial	383720	204770	100	1077	34.74 Door	
1 Bridge Road	Stroud		19 Private	382550	204660	50	605	34.77 Door	
Hoopers of Ebberly	Ebberly		20 Commercial	382420	204640	350	633	34.77 Door	
3 Bridge Road	Ebberly		19 Private	382550	204750	25	607	34.78 Door	
189 Westward Road	The Grove		20 Private	382830	204700	50	568	34.8 Door	
Flets 1-4	Stroud		20 Private	382550	204710	109	597	34.87 Door	
Hoopers of Ebberly	Stroud		20 Commercial	382400	204650	162	635	34.89 Door	
4 Bridge Side	Stroud		20 Private	383520	204880	38	1057	34.89 Door	
1 Bridge Side	Stroud		20 Private	383530	204890	38	1054	34.9 Door	
3 Bridge Side	Stroud		20 Private	383530	204890	38	1055	34.92 Door	
2 Bridge Side	Stroud		20 Private	383180	204740	77	1287	34.96 Door	PROF
The Copeland Chatterton Co	Stroud		20 Industrial	383180	204710	62	567	34.98 Door	
15 Frome Gardens	Ebberly		20 Private	383190	204750	77	1286	34.99 D.P.C.	
177 Westward Road	Stroud		20 School	381435	204665	1000	1833	35.05 Door	PROF
14 Frome Gardens	Stroud		20 Private	383200	204750	77	1284	35.07 D.P.C.	
The Copeland Chatterton Co	Ebberly		20 Commercial	382500	204680	200	626	35.08 Door	
Wyndcliffe Junior School, Ryelord	Stroud		20 Private	383160	204730	54	1291	35.1 D.P.C.	
Quicksands Maintenance Contractors	Stroud		19 Private	382910	204720	125	550	35.12 Door	
13 Frome gardens	Ebberly		20 Private	382840	204710	75	570	35.15 Door	
Cambridge House	Stroud		20 Private	383130	204710	84	1295	35.17 D.P.C.	
193 Westward Road	Stroud		20 Commercial	382980	204730	437	553	35.18 Door	
23 Frome Gardens	Stroud		20 empty	383600	204400	150	1206	35.2 D.P.C.	
Auto-Rentals	Stroud		20 Private	383140	204710	66	1294	35.2 D.P.C.	
Building under construction	Stroud		20 Private	383170	204740	60	1288	35.21 D.P.C.	
22 Frome Gardens	Stroud		20 Private	383170	204740	60	1289	35.21 D.P.C.	
16 Frome Gardens	Ebberly		19 Private	382840	204710	75	569	35.24 Door	
17 Frome Gardens	Stroud		20 Private	382460	204670	20	627	35.25 Door	
191 Westward Road	Stroud		20 Commercial	383600	204550	100	1217	35.32 D.P.C.	
301 Westward Road	Ebberly		20 Industrial	383670	204730	624	1083	35.34 Door	
Total Garage	Stroud		20 Private	383140	204730	66	1293	35.4 D.P.C.	
Redley	Stroud		30 Private	383150	204730	54	1282	35.41 D.P.C.	
21 Frome Gardens	Stroud		20 Private	383160	204730	66	1290	35.44 D.P.C.	
20 Frome Gardens	Stroud		20 School	381485	204675	180	1834	35.46 Door	
18 Frome Gardens	Ryelord		19 Private	382820	204730	25	575	35.52 Door	
Wydcliffe Junior School	Ebberly		19 Private	382840	204720	37	571	35.57 Door	
203 & 205 Westward Road	Ebberly		19 Private	382830	204472	37	573	35.6 Door	
195 Westward Road	Ebberly		20 Private	383290	204550	35	1254	35.64 Door	
197 Westward Road	Ebberly		20 Commercial	382400	204660	175	634	35.65 Door	
199 Westward Road	Ebberly		19 Private	382830	204730	50	574	35.65 Door	
1 Meadow End	Meadow Lane		19 Private	383500	204470	48	1224	35.7 D.P.C.	
Hoopers of Ebberly	Ebberly		20 Private	383560	204460	50	1201	35.71 D.P.C.	
201 Westward Road	Stroud		20 Private	383600	204440	35	1198	35.73 D.P.C.	
2 Park View	Stroud		20 Private	383590	204450	40	1198	35.74 D.P.C.	
62 Dudbridge Meadow	Stroud		20 Private	383600	204440	40	1197	35.75 D.P.C.	
52 Dudbridge Meadow	Stroud		20 Private	383620	204520	70	1216	35.75 D.P.C.	
54 Dudbridge Meadow	Stroud		20 Private	383580	204450	50	1189	35.76 D.P.C.	
Orchard Side	Stroud		20 Private	383570	204450	65	1200	35.76 D.P.C.	
58 Dudbridge Meadow	Stroud		20 Private	383280	204550	48	1255	35.8 Door	
60 Dudbridge Meadow	Ebberly		19 Private	382810	204740	47	576	35.8 Door	
2 Meadow End	Ebberly		20 garages	382800	204740	37	577	35.83 Door	
207 Westward Road	Stroud			383660	204850	60	1073	35.83 Door	
211 Westward Road	Stroud								
Enviro Technology (garages)	Stroud								

Wyatts Junior School	Ryford	19 School	381405	204705	800	1832	35.69	Door
40 Stanley View	Stroud	20 Private	383710	204360	35	1156	35.85	D.P.C.
38 Stanley View	Stroud	20 Private	383710	204370	40	1155	35.86	D.P.C.
208 Westward Road	Ebbey	19 Private	382800	204730	56	579	35.968	Door
1 Stanley View	Stroud	20 Private	383690	204410	35	1135	35.97	D.P.C.
5-8 The Grove	Ebbey	20 Private	382540	204710	109	598	35.985	Door
3 Stanley View	Stroud	20 Private	383690	204410	35	1136	35.99	D.P.C.
Enviro Technology	Stroud	20 Industrial	383650	204860	198	1072	35.99	Door
68 Stanley View	Stroud	20 Private	383720	204350	35	1157	36	D.P.C.
84 Stanley View	Stroud	20 Private	383720	204350	35	1158	36	D.P.C.
34 Duddridge Meadow	Stroud	20 Private	383650	204460	32	1127	36	D.P.C.
22 Duddridge Meadow	Stroud	20 Private	383680	204500	40	1121	36.008	D.P.C.
3 Meadow End	Stroud	20 Private	383270	204550	45	1258	36.01	Door
32 Duddridge Meadow	Stroud	20 Private	383650	204460	28	1126	36.02	D.P.C.
24 Duddridge Meadow	Stroud	20 Private	383650	204490	28	1122	36.02	D.P.C.
28 Duddridge Meadow	Stroud	20 Private	383640	204480	30	1124	36.02	D.P.C.
28 Duddridge Meadow	Stroud	20 Private	383650	204480	40	1123	36.03	D.P.C.
42 Stanley View	Stroud	20 Private	383690	204350	40	1169	36.03	D.P.C.
B-12 The Grove	Ebbey	20 Private	382530	204700	109	599	36.03	Door
30 Duddridge Meadow	Stroud	20 Private	383660	204500	40	1120	36.04	D.P.C.
30 Duddridge Meadow	Stroud	20 Private	383640	204480	40	1125	36.04	D.P.C.
44 Stanley View	Stroud	20 Private	383710	204340	35	1168	36.06	D.P.C.
62 Stanley View	Stroud	20 Private	383710	204340	40	1159	36.07	D.P.C.
58 Stanley View	Stroud	20 Private	383710	204330	35	1181	36.07	D.P.C.
64 Duddridge Meadow	Stroud	20 Private	383550	204450	40	1202	36.08	D.P.C.
60 Stanley View	Stroud	20 Private	383710	204330	35	1160	36.08	D.P.C.
18 Duddridge Meadow	Stroud	20 Private	383610	204420	35	1195	36.09	D.P.C.
38-42 (Bats) Duddridge Meadow	Stroud	20 Private	383630	204440	110	1192	36.09	D.P.C.
44.50 (Bats) Duddridge Meadow	Stroud	20 Private	383620	204440	110	1193	36.1	D.P.C.
52 Stanley View	Stroud	20 Private	383680	204330	35	1164	36.11	D.P.C.
17 Duddridge Meadow	Stroud	20 Private	383810	204420	35	1194	36.11	D.P.C.
5 Stanley View	Stroud	20 Private	383710	204390	55	1137	36.11	Door
319 Westward Road	Ebbey	20 Private	382390	204670	47	636	36.11	Door
48 Stanley View	Stroud	20 Private	383870	204340	35	1168	36.14	D.P.C.
54 Stanley View	Stroud	20 Private	383700	204320	35	1162	36.14	D.P.C.
50 Stanley View	Stroud	20 Private	383700	204320	35	1165	36.14	D.P.C.
48 Stanley View	Stroud	20 Private	383680	204330	40	1167	36.15	D.P.C.
8 Stanley View	Stroud	20 Private	383670	204350	40	1167	36.15	D.P.C.
6 Stanley View	Stroud	20 Private	383650	204400	35	1186	36.15	D.P.C.
34 Stanley View	Stroud	20 Private	383650	204400	40	1187	36.15	D.P.C.
32 Stanley View	Stroud	20 Private	383680	204390	45	1172	36.17	D.P.C.
Enviro Technology (gallies)	Stroud	20 Private	383670	204370	35	1173	36.18	D.P.C.
34 Stanley View	Stroud	20 Private	383670	204370	45	1074	36.18	Door
8 Duddridge Meadow	Stroud	20 Private	383700	204320	40	1163	36.18	D.P.C.
30 Stanley View	Stroud	20 Private	383660	204420	35	1180	36.19	D.P.C.
11 Stanley View	Stroud	20 Private	383670	204370	35	1175	36.19	D.P.C.
Duddridge Meadow	Stroud	20 Private	383730	204390	40	1152	36.23	D.P.C.
Building under construction	Stroud	20 Empty	381630	204420	40	1189	36.23	D.P.C.
2 Stanley View	Stroud	20 Empty	383560	204420	98	1205	36.24	D.P.C.
43 Stanley View	Stroud	20 Private	383870	204400	40	1170	36.25	D.P.C.
38 Stanley View	Stroud	20 Private	383730	204370	48	1153	36.26	D.P.C.
4 Stanley View	Stroud	20 Private	383730	204380	35	1151	36.26	D.P.C.
Duddridge	Stroud	20 Private	383670	204390	35	1171	36.26	D.P.C.
17 Stanley View	Stroud	20 Private	383710	204440	50	1142	36.27	D.P.C.
45 Stanley View	Stroud	20 Private	383740	204370	48	1154	36.272	D.P.C.
14 Stanley View	Stroud	20 Private	383680	204400	35	1183	36.28	D.P.C.
18 Stanley View	Stroud	20 Private	383630	204380	35	1181	36.28	D.P.C.
15 Stanley View	Stroud	20 Private	383710	204440	50	1143	36.28	D.P.C.
Tarmwood Building Supplies	Ebbey	19 Commercial	382600	204700	831	596	36.28	Door
12 Stanley View	Stroud	20 Private	383620	204410	35	1184	36.29	D.P.C.
22 Stanley View	Stroud	20 Private	383640	204370	35	1179	36.29	D.P.C.
7 Duddridge Meadow	Stroud	20 Private	383680	204430	35	1134	36.3	D.P.C.
5 Duddridge Meadow	Stroud	20 Private	383680	204430	40	1133	36.3	D.P.C.
24 Stanley View	Stroud	20 Private	383640	204370	40	1178	36.31	D.P.C.
13 Duddridge Meadow	Stroud	20 Private	383640	204420	40	1190	36.31	D.P.C.
18 Stanley View	Stroud	20 Private	383620	204400	40	1182	36.32	D.P.C.
28 Stanley View	Stroud	20 Private	383660	204370	35	1176	36.32	D.P.C.
Stanley View	Stroud	20 Private	383630	204390	45	1160	36.32	D.P.C.
10 Stanley View	Stroud	20 Private	383630	204410	35	1185	36.33	D.P.C.
15 Duddridge Meadow	Stroud	20 Private	383640	204420	35	1191	36.33	D.P.C.
26 Stanley View	Stroud	20 Private	383650	204370	40	1177	36.33	D.P.C.
Riverside	Stroud	19 Private	383410	204500	40	1231	36.34	Door
11 Stanley View	Stroud	20 Private	383720	204420	40	1140	36.35	D.P.C.
13 Stanley View	Stroud	20 Private	383720	204420	40	1140	36.35	D.P.C.
9 Stanley View	Stroud	20 Private	383720	204410	40	1139	36.36	D.P.C.
35 Stanley View	Stroud	20 Private	383720	204390	40	1149	36.37	D.P.C.
37 Stanley View	Stroud	20 Private	383750	204390	40	1150	36.38	D.P.C.
7 Stanley View	Stroud	20 Private	383720	204410	35	1138	36.39	D.P.C.
27 Stanley View	Stroud	20 Private	383740	204430	50	1145	36.42	D.P.C.

28 Stanley View	Stroud	383740	204430	50	1148	38.43 D.P.C.	PROF
4 Dudbridge Meadow	Stroud	383660	204460	40	1128	38.44 D.P.C.	
2 Dudbridge Meadow	Stroud	383660	204460	35	1130	38.44 D.P.C.	
Empty Warehouse	Stroud	384050	204870	818	489	38.51 Door	
68 Dudbridge Meadow	Stroud	383350	204450	35	1203	38.51 D.P.C.	
6 Dudbridge Meadow	Stroud	383340	204440	35	1204	38.52 D.P.C.	
33 Stanley View	Stroud	383670	204470	55	1128	38.53 D.P.C.	
3 Dudbridge Meadow	Stroud	383750	204410	45	1148	38.54 D.P.C.	
31 Stanley View	Stroud	383680	204460	40	1132	38.54 D.P.C.	
1 Dudbridge Meadow	Stroud	383750	204410	45	1147	38.56 Door	
Hayter & Cooke Ltd Copy shop/C	Stroud	383700	204430	50	1131	38.56 D.P.C.	
Weyfield	Dudbridge	384160	204800	1360	463	38.56 Door	PROF
19-25 Stanley View (flat)	Dudbridge	383580	204830	144	1098	38.57 Door	
12 Dudbridge Meadow	Stroud	383410	204510	60	1232	38.61 D.P.C.	
10 Dudbridge Meadow	Stroud	383680	204490	40	1117	38.63 D.P.C.	
18 Dudbridge Meadow	Stroud	383730	204450	105	1144	38.63 D.P.C.	
The Mill Shop	Stroud	383680	204480	40	1119	38.64 D.P.C.	
16 Dudbridge Meadow	Stroud	383700	204500	40	1119	38.65 D.P.C.	
8 Dudbridge Meadow	Stroud	383680	204500	35	1118	38.65 D.P.C.	
Frame Hall Lodge	Stroud	383700	204480	21	1114	38.65 D.P.C.	
Empty	Stroud	384200	204850	80	482	38.68 Door	PROF
Severn Instruments Ltd	Stroud	384120	204830	1340	467	38.7 Door	PROF
Severn Instruments	Stroud	384160	204800	692	484	38.72 Door	PROF
235a Westward Road (children's home) Ebey	Stroud	384170	204860	360	465	38.74 Door	PROF
Mount Pleasant	Stroud	384140	204860	648	488	38.78 Door	PROF
Wintertonham	Stroud	382780	204730	175	580	38.85 Door	
Wintertonham	Stroud	384010	204170	158	1019	37 Door	
Wintertonham	Stroud	384340	205000	752	458	37.05 Door	
Wintertonham	Stroud	384380	204990	120	455	37.2 Door	
Wintertonham	Stroud	384270	204990	600	481	37.22 Door	
Stone Meadow Lane	Stroud	383350	204520	42	1248	37.23 Door	
Wyedcliffe Junior School	Stroud	381463	204895	260	1835	37.27 Door	PROF
3 Lodgecote Cottage	Stroud	384320	205020	9	459	37.29 Door	PROF
2 Lodgecote Cottages	Stroud	384330	205020	340	480	37.32 Door	PROF
Wintertonham	Stroud	384340	205020	160	457	37.33 Door	PROF
1 Lodgecote Cottage	Stroud	383580	204800	49	1069	37.34 Door	PROF
Karnes	Stroud	383310	204530	63	1249	37.35 Door	
1 Blue Row	Stroud	383260	204530	135	1253	37.44 D.P.C.	
Tringale	Stroud	382390	204870	81	637	37.49 Door	
323 Westward Road	Stroud	383590	204800	49	1068	37.55 Door	
Lawn Cottage	Stroud	383310	204520	35	1250	37.6 Door	
2 Blue Row	Stroud	382600	204730	275	584	37.64 Door	
Dolphin Munday Sundries Ltd	Stroud	382100	204680	50	658	37.74 Door	
25 Westward Road	Stroud	382350	204870	94	638	37.78 D.P.C.	
Woodpeckers	Stroud	383310	204520	35	1251	37.83 Door	
3 Blue Row	Stroud	382820	204720	262	595	37.85 Door	
The Western Pattern Mailing Co	Stroud	383360	204400	35	1207	37.85 D.P.C.	
31 Dudbridge Meadow	Stroud	383310	204510	55	1252	37.87 Door	
Marose	Stroud	381543	204685	90	1845	37.82 Door	
Buchford	Stroud	381555	204685	90	1846	37.86 Door	
Wyedcliffe Junior School	Stroud	381425	204735	130	1837	38.02 Door	
281 Westward Road	Stroud	382600	204740	150	593	38.04 Door	
Wyedcliffe Junior School	Stroud	381455	204725	210	1838	38.06 Door	
Cane Cottage	Stroud	384010	205050	58	535	38.12 Door	
75-81 (flat) Dudbridge Meadow	Stroud	383640	204320	117	1215	38.19 D.P.C.	
15 Westward Road	Stroud	382000	204690	240	662	38.23 C.F.	
43-49 (flat) Dudbridge Meadow	Stroud	383590	204370	117	1211	38.23 D.P.C.	
35-41 (flat)	Stroud	383580	204360	117	1210	38.25 D.P.C.	
33 Dudbridge Meadow	Stroud	383550	204400	35	1208	38.27 D.P.C.	
51-41 (flat) Dudbridge Meadow	Stroud	383810	204350	117	1213	38.37 D.P.C.	
Grystones	Stroud	381585	204685	70	1847	38.375 Door	
Marlow	Stroud	381585	204685	80	1848	38.4 Door	
Wintertonham	Stroud	384500	205000	4128	454	38.48 Door	PROF
27 Westward Road	Stroud	382110	204680	44	655	38.52 Door	
235 Westward Road	Stroud	382750	204750	710	581	38.53 Door	
5 Ebey Rd	Stroud	381595	204695	70	1849	38.533 Door	
Severn Trent Water Depot	Stroud	384660	205070	60	450	38.54 Door	PROF
63-73 (flat) Dudbridge Meadows	Stroud	383620	204340	117	1214	38.57 D.P.C.	PROF
Wintertonham	Stroud	384550	205040	440	452	38.63 Door	
29 Westward Road	Stroud	382120	204690	50	654	38.64 Door	
13 Ebey Rd	Stroud	381825	204695	80	1853	38.67 Door	
Glyn, Ebey Rd	Stroud	381605	204695	60	1850	38.67 Door	
7 St John's Ambulance Headquarters	Stroud	384770	205040	50	434	38.71 Door	PROF
31 Westward Road	Stroud	382130	204690	50	653	38.71 Door	
21 Westward Road	Stroud	382080	204680	50	658	38.73 Door	

23 Westward Road	Ebbey			20 Private	382090	204690	50	657	38.74	Door	
19 Westward Road	Ebbey			20 Private	382090	204690	50	659	38.75	Door	
17 Westward Road	Ebbey			20 Private	382070	204690	50	660	38.76	Door	
9 Walbridge	Stroud			20 Private	384750	205040	38	432	38.79	Door	
Saw-Ho Soft Furnishings	Stroud			20 Industrial	384660	205080	160	448	38.8	Door	
O	Stroud			19 Industrial	384760	205020	132	428	38.85	Door	
Walbridge	Stroud			20 Private	384760	205040	84	433	38.85	Door	
Wharfedale Performance & Service	Stroud			19 Industrial	384760	205030	4380	453	38.88	Door	
10 Lodgemoor Close	Stroud			20 Private	384340	205000	36	427	38.89	Door	
12 Lodgemoor Close	Stroud			20 Private	384320	205090	38	528	38.89	D.P.C.	
R	Stroud			20 Commercial	384730	205030	145	430	38.89	Door	
11 Lodgemoor Close	Stroud			20 Private	384330	205090	36	529	38.9	D.P.C.	
9 Lodgemoor Close	Stroud			20 Private	384340	205100	38	527	38.91	D.P.C.	
Tree Tops	Stroud			20 Private	382060	204680	68	681	38.91	Door	
Phil Neale	Stroud			19 Industrial	384770	205000	38	426	38.91	Door	
33 Westward Road	Ebbey			20 Private	382140	204690	50	652	38.94	Door	
Savem Trent Water Depot	Stroud			20 Office	384640	205070	38	451	38.96	Door	
337 Westward Road	Ebbey			20 Private	382330	204670	100	639	38.96	Door	
271 Westward Road	Ebbey			20 Private	382620	204770	75	590	38.99	Door	
Man. Gibbons	Stroud			19 Store	384750	205000	38	425	38.01	Door	
St Michaels Church Hall	Stroud			20 Public	383060	204760	300	1225	38.02	Door	
Lycda Motors	Stroud			19 Industrial	384740	205000	38	424	38.04	Door	
D	Stroud			20 Industrial	384410	204970	182	422	38.04	Door	
33 Westward Road	Ebbey			20 Industrial	384770	204690	728	423	38.06	Door	
341 Westward Road	Ebbey			20 Private	382150	204690	50	651	38.06	Door	
15 Westward Road (garage)	Ebbey			20 Private	382310	204690	55	640	38.06	D.P.C.	
343 Westward Road	Ebbey			20 Private	382040	204690	39	663	38.06	Door	
10 Walbridge	Stroud			20 Private	382300	204690	47	641	38.07	Door	
269 Westward Road	Ebbey			20 Private	384750	205040	48	431	38.09	Door	
Wharf House (empty) Stroud	Stroud			20 Discard	382630	204770	84	589	38.15	Door	
7 Westward Road	Ebbey			20 Private	384640	205020	32	476	38.21	Door	
Beeknield Merchants Ltd	Stroud			20 Private	382220	204680	100	646	38.24	D.P.C.	
The Mill Laundry	Stroud			20 Commercial	384690	205060	100	446	38.25	Door	
287 Westward Road	Ebbey			20 Private	384690	205070	100	447	38.28	Door	
347 Westward Road	Ebbey			20 Private	382840	204770	125	588	38.33	Door	
345 Westward Road	Ebbey			20 Private	382270	204690	100	643	38.36	Door	
37 Westward Road	Ebbey			20 Private	382790	204690	47	642	38.36	Door	
Ebbey Post Office	Stroud			20 Private	382160	204700	100	650	38.36	D.P.C.	
Hill View, Ebbey Rd	Stroud			20 Commercial	382850	204770	84	587	38.45	Door	
Squirrels Lodge	Stroud			20 Private	381825	204706	75	1852	38.476	Door	
Fairview, Ebbey Rd	Stroud			20 Private	382250	204680	75	644	38.51	Door	
277 Westward Road	Ebbey			20 Private	381615	204706	90	1651	38.52	Door	
275 Westward Road	Ebbey			20 Private	382240	204690	75	645	38.52	Door	
74-80 (flat) Dudbridge Meadow	Stroud			20 Private	382810	204740	37	592	38.62	Door	
87 Westward Road	Stroud			20 Private	382810	204750	55	591	38.71	Door	
28 Westward Road	Stroud			20 Private	383370	204350	117	1219	38.72	D.P.C.	
28 Bridge Street	Stroud			20 Private	383370	204650	40	1310	38.74	Door	
28 Bridge Street	Stroud			20 Private	382180	204700	100	648	38.75	D.P.C.	
81 Westward Road	Stroud			20 Private	383360	204900	40	1062	38.75	Door	
Coroners Garage	Stroud			20 Private	383360	204500	45	1053	38.76	Door	
81 Westward Road	Stroud			20 Commercial	382670	204760	700	585	38.77	Door	
8 Lodgemoor Close	Stroud			18 Private	383380	204660	50	1074	38.78	Door	
249 Westward Road	Ebbey			20 Private	384340	205120	38	526	38.79	D.P.C.	
247 Westward Road	Ebbey			19 Private	382710	204770	75	584	38.81	Door	
41 Westward Road	Stroud			19 Private	382720	204770	58	583	38.82	Door	
89 Westward Road	Stroud			20 Private	382190	204700	58	648	38.89	Door	
85 Westward Rd	Stroud			20 Private	383360	204850	54	1311	38.9	Door	
O	Stroud			20 Private	383370	204850	40	1309	38.91	Door	
Glencot	Stroud			20 Private	383390	204850	40	1308	38.93	Door	
Quick Fit Garage	Stroud			20 Industrial	384410	204850	98	421	38.98	Door	
Glencot	Stroud			20 Private	382200	204700	80	647	38.98	Door	
2 Lodgemoor Close	Stroud			20 Commercial	384710	205020	112	429	40.02	Door	
Clock House	Stroud			19 Private	382700	204770	112	585	40.08	Door	
24 Bridge Street	Stroud			20 VHS	384310	205110	38	524	40.25	D.P.C.	
Tyrum House	Stroud			20 Private	384760	204970	120	420	40.28	Door	
23 Bridge Street	Stroud			20 Private	384300	205110	38	523	40.27	D.P.C.	
Dudbridge House	Stroud			19 Private	383550	204910	32	1051	40.31	Door	
7 Lodgemoor Close	Stroud			20 Private	383980	205060	100	1351	40.34	D.P.C.	
Bud & Sons	Stroud			18 empty	383550	204910	32	1050	40.37	Door	
J	Stroud			20 Private	384340	205120	38	525	40.71	C.V.	
The Railway Inn	Stroud			20 Commercial	384620	205060	440	417	40.74	D.P.C.	
22 Bridge Street	Stroud			19 Consultants	384720	205090	128	445	41.08	Door	
21 Bridge Street	Stroud			20 Private	383660	204550	230	1113	41.21	Door	
Telephone Exchange	Stroud			20 Private	383540	204910	38	1049	41.258	Door	
Stroud	Stroud			20 Telephone exchange	384220	205120	420	521	41.44	Door	
				20 Private	383980	205070	120	1352	41.49	D.P.C.	

F	Towian	Hopson Building Contractors	Stroud	20 Industrial	3841600	205060	180	449	41.54	Door
	Vetrossa	Stroud		20 Private	384010	205060	30	537	41.55	Door
	20 Bridge Street	Stroud		20 Private	384010	205060	30	538	41.59	Door
	19 Bridge Street	Stroud		20 Private	383540	204820	28	1047	41.77	Door
	127 Westward Road	Stroud		20 Private	383530	204820	35	1046	41.78	Door
	11 Fort View Terrace	Stroud		78 Private	383100	204810	144	1324	41.79	Door
	12 Fort View Terrace	Stroud		20 Private	383480	204910	32	1043	41.82	Door
	10 Fort View Terrace	Stroud		20 Private	383470	204910	32	1044	41.83	Door
	9 Fort View Terrace	Stroud		20 Private	383460	204820	32	1041	41.89	Door
	8 Fort View Terrace	Stroud		20 Private	383500	204820	32	1038	41.93	Door
	7 Fort View Terrace	Stroud		20 Private	383500	204820	32	1039	42.09	Door
	125 Westward Road	Stroud		18 Private	383100	204810	130	1323	42.17	Door
	Collevende	Chestnut Lane	Stroud	20 Private	383970	205090	84	1353	42.24	D.P.C.
	4 Port View Terrace	Stroud		20 Commercial	383530	204920	32	1036	42.27	Door
	18 Bridge Street	Stroud		20 Private	383510	204930	32	1035	42.28	D.P.C.
	3 Port View Terrace	Stroud		20 Private	383520	204930	30	1034	42.31	Door
	1 Port View Terrace	Stroud		20 Private	384000	205100	70	538	42.37	Door
	Springfield Cottage	Stroud		20 Private	383520	204820	50	1033	42.45	Door
	1A Port View Terrace	Stroud		20 Commercial	383150	204790	63	1318	42.67	Door
	H & L Motors	Stroud		20 Private	384250	205140	80	522	42.74	Door
	Lodgemore House	Stroud		20 Private	383140	204770	96	1321	42.79	Door
	139 Calncross Road	Stroud		20 Commercial	383940	205090	98	1363	42.85	D.P.C.
	Railton Products	Stroud		18 red cross	383140	204800	140	1319	42.89	Door
	Red Cross	Stroud		20 Private	383130	204800	80	1320	42.93	Door
	5 Fort View Terrace	Stroud		20 Private	383510	204830	32	1037	42.99	Door
	8 Fort View Terrace	Stroud		20 Private	383490	204920	32	1040	42.985	Door
	Andracapas	Stroud		20 Commercial	383160	204780	36	1317	43.02	Door
	Motorcycle MOT Centre	Stroud		20 Commercial	383190	204780	65	1314	43.06	Door
	3 Lodgemore Close	Stroud		20 Private	384320	205130	38	531	43.1	D.P.C.
	Peris Auto	Stroud		20 Commercial	383180	204780	80	1315	43.12	Door
	4 Lodgemore Close	Stroud		20 Private	384320	205130	38	532	43.12	D.P.C.
	5 Lodgemore Close	Stroud		20 Private	384330	205130	36	533	43.38	D.P.C.
	6 Lodgemore Close	Stroud		20 Private	384340	205130	36	534	43.39	D.P.C.
	Sunny Glen	Stroud		20 Private	383920	205090	96	1362	43.56	D.P.C.
	T	Calncross Road	Stroud	20 Commercial	384830	205070	72	416	43.57	Door
	Stroud R.A.O.B. Social Club	B	H & Sons	20 Commercial	384860	205030	72	414	43.8	Door
	5 Bridge Street	Stroud	H	20 Public	383590	205010	224	475	44.03	C.V.
	Goodrest	Chestnut Lane	Stroud	20 Private	383970	205110	140	1354	44.07	Door
	T	B	Stroud	20 Commercial	384820	204960	1000	413	44.07	Door
	Walbridge House	B	H & Sons	18 Private	384720	204970	140	419	44.09	C.F.
	T	B	H & Sons	20 Commercial	384890	205020	48	415	44.14	Door
	4 Bridge Street	Stroud	H & Sons	20 Commercial	384900	205000	78	412	44.26	Door
	H & L Motors	Westward Road	H & Sons	20 Private	383500	204940	44	1030	44.28	Door
	H & L Motors	Stroud	Stroud	19 Commercial	383220	204820	180	1313	44.37	Door
	Stroud Prediction	Stroud	Stroud	19 Commercial	383210	204810	200	1312	44.38	Door
	Graham Reeves Building Merchant	Stroud	Stroud	20 Commercial	383180	204790	194	1316	44.39	Door
	16 Anchor Terrace	Stroud	Stroud	20 Private	384910	205030	72	437	44.53	Door
	Ticorn House	Stroud	Stroud	20 Commercial	384560	205000	54	470	44.57	Door
	3 Bridge Street	Westward Road	Stroud	20 Govt. Offices	383520	204860	756	1022	44.63	Door
	10 Anchor Terrace	Stroud	Stroud	20 Private	383480	204940	44	1029	44.64	Door
	Calncross Filling Station	Stroud	Stroud	20 Private	384580	205010	54	474	44.68	Window
	8 Anchor Terrace	Stroud	Stroud	20 Commercial	383180	204820	48	1322	44.69	Door
	2 Bridge Street	Stroud	Stroud	20 Private	384580	205000	54	475	44.72	Window
	14 Anchor Terrace	Stroud	Stroud	20 Private	383490	204940	36	1028	44.81	Door
	12 Anchor Terrace	Stroud	Stroud	20 Private	384570	205000	54	471	45.07	Window
	T	Bull & Sons	Stroud	20 Private	384570	205000	54	472	45.13	Window
	1-5 Bowbridge Lock (Halls)	Stroud	Stroud	20 Commercial	384950	204920	12	411	45.18	Door
	St Luke's Therapy Centre	Stroud	Stroud	20 Private	385775	204265	117	353	45.26	Door
	The Gables	Stroud	Stroud	19 Priv. Health ctn	384400	205150	512	518	45.4	Window
	Kilnady	Chestnut Lane	Stroud	20 Private	383940	205120	88	1355	45.48	D.P.C.
	79 Westward Road	Stroud	Stroud	20 Private	384000	205120	64	539	45.5	D.P.C.
	1 Bridge Street	Stroud	Stroud	20 Private	383380	204860	48	1272	45.63	Door
	1 Arundel Mkt Cottage	Stroud	Stroud	19 Private	383480	204950	36	1027	45.68	Door
	2 Arundel Mkt Cottage	Stroud	Stroud	20 Private	385580	204580	25	398	45.73	Door
	75 Westward Road	Stroud	Stroud	20 Private	385590	204580	40	397	45.74	Door
	Christian Community Centre	Stroud	Stroud	20 Private	383370	204890	42	1270	45.79	Door
	C Dragon Fish & Chips	Stroud	Stroud	20 Public	383360	204890	68	1271	45.85	Door
	Double D Bookmakers	Stroud	Stroud	20 Commercial	384320	205160	140	520	45.87	Door
	The Bull Hotel	Stroud	Stroud	20 Commercial	384880	205050	72	436	45.88	Door
	John Squire Services	Stroud	Stroud	20 Commercial	383370	204890	40	1269	45.96	Door
	69 Westward Road	Stroud	Stroud	20 Private	383380	204900	54	1268	45.96	Door
	Stroud Furniture Makers	Stroud	Stroud	19 Public House	384650	205100	128	435	45.99	Door
		Stroud	Stroud	20 Industrial	385010	204920	345	400	46.02	Door
		Stroud	Stroud	20 Private	383390	204890	122	1266	46.03	Door
		Stroud	Stroud	19 Commercial	383470	204930	48	1028	46.05	Door

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Vine House	23 Westward Road	Stroud	383480	204850	110	1025	48.18	Door
Munro Kitchens	Westward Road	Stroud	383480	204850	100	1023	48.25	Door
63 Westward Road	Stroud	Stroud	383390	204800	36	1285	46.28	Door
83 Westward Road	Stroud	Stroud	383400	204900	36	1264	48.28	Door
25 Westward Road	Stroud	Stroud	383460	204940	98	1024	48.28	Door
Raymonds Electrica	Stroud	Stroud	383400	204910	98	1262	46.28	Door
81 Westward Road	Stroud	Stroud	383400	204900	36	1263	48.3	Door
M	G	M Motor Components	385020	204920	180	401	48.35	Door
John Davies	Accident Repair Workshop	Stroud	385020	204900	180	402	48.35	Door
George Dickinson Tyre & Exhaust Centre	Thrupp	Stroud	385020	203850	240	338	48.42	Door
Press-Gang	Westward Road	Stroud	383450	204920	168	1022	48.52	Door
45 Westward Road	Stroud	Stroud	383410	204910	40	1259	48.54	Door
25 Westward Road	Stroud	Stroud	383420	204910	40	1260	48.54	Door
43 Westward Road	Dudbridge Hx	Stroud	383720	204530	100	1112	46.54	D.P.C.
Vend	Stroud	Stroud	383420	204910	40	1261	48.54	Door
41 Westward Road	Stroud	(cottage)	384700	204970	36	418	48.54	Door
Wallbridge House	Stroud	Stroud	385960	203930	2000	334	48.55	Door
Stroud Architecture Systems Ltd	Thrupp	Stroud	383410	204910	40	1258	48.56	Door
47 Westward Road	Stroud	Stroud	385960	203850	128	337	48.59	Door
B & H Engineering (Stroud)	Thrupp	Stroud	383430	204910	134	1020	48.6	Door
Stroud Sign Centre	Stroud	Stroud	385040	204890	90	404	46.62	Door
Denmana	Stroud	Stroud	385040	204890	90	403	46.63	Door
Serim Vale Horticultural	Stroud	Stroud	385050	204900	180	405	48.64	Door
Coly Electrical Factors Ltd	Stroud	Stroud	385050	204900	180	405	48.64	Door
37 Westward Place	Stroud	Stroud	385080	204870	90	408	48.65	Door
R	J Agnew Motor Engineer	Stroud	385140	204840	400	410	48.65	Door
S & R Scrap	Stroud	Stroud	385050	204880	96	408	48.68	Door
Wanwick Car Company	Stroud	Stroud	385815	204185	45	366	46.68	Door
21 Bowbridge Lock	Stroud	Stroud	385785	204225	30	359	46.69	Door
12 Bowbridge Lock	Stroud	Stroud	385795	204215	35	357	46.69	Door
8 Bowbridge Lock	Stroud	Stroud	385815	204215	35	364	46.69	Door
16 Bowbridge Lock	Stroud	Stroud	385795	204215	35	363	46.7	Door
13 Bowbridge Lock	Stroud	Stroud	385795	204215	35	363	46.71	Door
20 Bowbridge Lock	Stroud	Stroud	385785	204245	32	354	46.71	Door
14 Bowbridge Lock	Stroud	Stroud	385070	204870	90	407	46.72	Door
8 Bowbridge Lock	Stroud	Stroud	385785	204235	35	356	46.78	Door
Wanwick Car Company	Stroud	Stroud	385100	204860	230	409	46.8	Door
7 Bowbridge Lock	Stroud	Stroud	385820	204170	254	374	46.88	Door
S & R Scrap	Thrupp	Thrupp	385960	203860	440	335	46.88	Door
Stroud Architectural Supplies Ltd	Thrupp	Thrupp	385840	204150	227	377	46.89	Door
28 Bowbridge Lock	Thrupp	Thrupp	385840	204150	227	378	46.89	Door
36 Bowbridge Lock	Thrupp	Thrupp	385805	204185	30	367	46.89	Door
37 Bowbridge Lock	Thrupp	Thrupp	385845	204155	227	373	46.89	Door
22 Bowbridge Lock	Thrupp	Thrupp	385820	204170	254	371	46.9	Door
31 Bowbridge Lock	Thrupp	Thrupp	385785	204225	77	362	46.918	Door
29 Bowbridge Lock	Thrupp	Thrupp	385795	204220	77	362	46.918	Door
B-11 Bowbridge Lock (Itals)	Thrupp	Thrupp	385930	203790	192	330	46.92	Door
15-17 Bowbridge Lock (Itals)	Thrupp	Thrupp	385940	204150	227	375	46.92	Door
D	Thrupp	Thrupp	385820	204170	254	372	46.92	Door
32 Bowbridge Lock	Thrupp	Thrupp	384700	205120	848	515	46.98	Door
30 Bowbridge Lock	Thrupp	Thrupp	385710	204390	240	382	48.97	Door
Wanhouse (empty) Stroud	Thrupp	Thrupp	385970	203850	40	338	48.97	Door
Animal Mill Cottage	Thrupp	Thrupp	385910	204560	48	398	47.02	Door
23-25 Bowbridge Lock (Itals)	Thrupp	Thrupp	385840	204150	227	378	47.02	Door
24 Bowbridge Lock	Thrupp	Thrupp	385820	204170	254	369	47.05	Door
25-27 Bowbridge Lock (Itals)	Thrupp	Thrupp	385820	204170	254	370	47.06	Door
23 Bowbridge Lock	Thrupp	Thrupp	385825	204175	254	368	47.06	Door
Barry Hunt Windows Thrupp	Thrupp	Thrupp	385960	203850	208	339	47.07	Door
Jackanory	Thrupp	Thrupp	384000	205140	64	540	47.07	D.P.C.
Chaz Nous	Thrupp	Thrupp	383960	205140	66	1356	47.09	D.P.C.
W	Thrupp	Thrupp	384435	204965	96	495	47.1	Door
J	Thrupp	Thrupp	385970	203820	200	333	47.11	Door
Robert Tims	Thrupp	Thrupp	384620	205120	240	517	47.12	Door
Bisore Cellular Extensions	Thrupp	Thrupp	385960	203890	90	340	47.18	Door
Amokas Car Sales	Thrupp	Thrupp	384660	205110	84	516	47.27	Door
Private Workshop	Thrupp	Thrupp	384400	204940	98	507	47.347	Door
The Cedars	Thrupp	Thrupp	384270	204900	154	510	47.38	Door
Lucky & Thompson Garage	Thrupp	Thrupp	385810	204280	120	378	47.38	Door
(full address unknown) Dudbridge Hx	Thrupp	Thrupp	383750	204580	88	1088	47.39	Door
M	Thrupp	Thrupp	383640	204610	162	1096	47.42	Door
Whittington House	Thrupp	Thrupp	384370	205160	124	519	47.43	Door
Stroud District Council	Thrupp	Thrupp	383720	204590	49	1090	47.49	Door
C	Thrupp	Thrupp	385980	203780	320	329	47.54	Door
Stroud District Council	Thrupp	Thrupp	383730	204600	460	1092	47.55	Door
J	Thrupp	Thrupp	385980	203810	400	332	47.6	Door
Stroud District Council	Thrupp	Thrupp	383730	204640	630	1093	47.62	Door
123 Calnecross Road	Thrupp	Thrupp	384010	205140	80	542	47.65	Door

Stroud District Council	Durdridge	Stroud	383730	204590	54	1091	47.66	Door
115 Calncross Road	Stroud	Stroud	384060	205140	80	545	47.68	Door
113 Calncross Road	Stroud	Stroud	384070	205140	90	546	47.67	Door
D	M Foundries	Thrupp	385940	203820	620	331	47.69	Door
1 Trevana Cottages	Thrupp	Stroud	386000	203640	50	323	47.81	Door
Alfordale	125 Calncross Road	Stroud	384000	205140	60	541	47.88	D.P.C.
A	R Daniels	Stroud	383750	204590	50	1087	47.9	Door
111 Calncross Road	Stroud	Stroud	384090	205140	48	547	47.83	Door
Lacey & Thompson Garage	Stroud	Stroud	383820	204290	60	380	47.83	Door
1 Clifton House	Thrupp	Stroud	386000	203640	50	327	47.97	Door
Falmerie	Thrupp	Stroud	385940	203540	400	318	47.97	Door
Agrunat	Thrupp	Stroud	385940	203520	1050	317	47.97	Door
3 Canton House	Thrupp	Stroud	386000	203620	50	325	48	Door
Staffordshire Mill Shop	Thrupp	Stroud	385980	203840	48	341	48.02	Door
Graham Reeves Building Merchant	Stroud	Stroud	384890	205100	780	438	48.02	Door
2 Canton House	Thrupp	Stroud	386000	203810	50	328	48.03	Door
M	E	B	383700	204600	150	1094	48.04	Door
2 Trevana Cottages	Thrupp	Stroud	386000	203630	50	324	48.05	Door
Mary Ellen	Stroud	Stroud	383750	204550	50	1088	48.08	Door
119 Calncross Road	Stroud	Stroud	384030	205140	60	543	48.1	Door
Associated Energy Services Ltd-Howlett group Ltd	Stroud	Stroud	386000	203540	300	316	48.11	Door
117 Calncross Road	Stroud	Stroud	384040	205140	90	544	48.14	Door
M	E	B	383700	204610	117	1085	48.16	Door
Cedars Lodge	Stroud	Stroud	384455	204905	38	496	49.2	Door
B	Walker	Thrupp	388000	203500	420	314	48.21	Door
Thrupp Tyre Co	Ltd	Thrupp	385950	203490	900	311	48.29	Door
107 Calncross Road	Stroud	Stroud	384100	205150	48	548	48.31	Door
135 Calncross Road	Stroud	Stroud	383920	205150	65	1357	48.32	Door
Stroud Sea Cadets Headquarters	Stroud	Stroud	384370	204920	276	598	48.33	Door
105 Calncross Road	Stroud	Stroud	384120	205150	72	549	48.37	Door
Jadecase Ltd	Thrupp	Stroud	385970	203470	160	312	48.43	Door
Bowbridge Vail Group	Stroud	Stroud	385730	204250	60	352	48.5	Door
S	G Bailey Paints Ltd	Thrupp	385980	203540	300	315	48.58	Door
Newcombe House	Stroud	Stroud	385810	204320	70	381	48.85	Door
Bridge Cottage	Stroud	Stroud	385710	204270	75	342	48.98	Door
20 Bath Road	Stroud	Stroud	384455	204845	40	494	49.05	Door
24 Bath Road	Stroud	Stroud	384445	204945	40	492	49.063	Door
22 Bath Road	Stroud	Stroud	386000	203480	260	313	49.09	Door
Empty	Stroud	Stroud	384435	204945	40	491	49.14	Door
26 Bath Road	Stroud	Stroud	383730	204530	60	1111	49.15	Door
Brendon	Durdridge Hill	Stroud	384465	204945	58	497	49.24	Door
Runnies Stones	Bath Road	Stroud	383930	205150	104	1358	49.31	Door
137 Calncross Road	Stroud	Stroud	384260	204860	130	511	49.34	Door
Middle	Stroud	Stroud	385950	203490	140	3118	49.49	Door
Tim Tyler	Furniture Dealer	Thrupp	386060	203240	280	296	49.5	Door
Carpets of Worth	Thrupp	Stroud	384435	204935	40	490	49.51	Door
28 Bath Road	Stroud	Stroud	386000	203580	390	320	49.57	Door
Warehouse (empty)	Stroud	Stroud	385970	203760	398	328	49.61	Door
SMH Ltd/Tony/Walter U	Stroud	Stroud	383440	204530	63	1110	49.62	Door
Hilcrest	Stroud	Stroud	386030	203200	30	295	49.68	Door
Hem House (Garage)	Thrupp	Stroud	386000	203540	60	319	49.77	Door
? LONDON Road	Thrupp	Stroud	385980	203680	105	322	49.78	Door
Gloucester Car & Caravan Centre	Stroud	Stroud	385720	204440	500	387	49.79	D.P.C.
Adcroft House	Stroud	Stroud	386010	203410	750	310	49.86	Door
Raco Processes	Stroud	Stroud	385700	204260	60	343	49.87	Door
Vale Cottage	Stroud	Stroud	383900	205140	84	1359	49.88	Door
141 Calncross Road	Stroud	Stroud	386100	203230	100	298	49.88	Door
Carpets of Worth	Thrupp	Stroud	383880	205150	108	1360	49.9	Door
Alexander House	Stroud	Stroud	384415	204915	40	486	49.95	Door
38 Bath Road	Stroud	Stroud	385780	204530	623	383	49.97	Door
Chestnut House	Stroud	Stroud	386000	203530	1150	307	49.98	Door
Raco Processes Ltd	Thrupp	Stroud	386070	203190	1000	287	50.02	Door
Carpets of Worth	Stroud	Stroud	384415	204925	40	487	50.02	Door
34 Bath Road	Stroud	Stroud	385990	203330	480	308	50.05	Door
Raco Processes	Thrupp	Stroud	386040	203160	120	284	50.08	Door
Hem House	Thrupp	Stroud	386000	203360	105	309	50.12	Door
Raco Processes	Stroud	Stroud	384425	204835	40	489	50.17	Door
30 Bath Road	Stroud	Stroud	386060	203310	60	308	50.2	Door
Souchez	Thrupp	Stroud	386060	203300	130	305	50.29	Door
Capitans	Thrupp	Stroud	384423	204923	40	488	50.34	Door
32 Bath Road	Stroud	Stroud	386120	203170	2800	299	50.4	Door
Carpets of Worth	Stroud	Stroud	385650	204340	60	351	50.4	C.F.
Devonham	Stroud	Stroud	384405	204915	40	485	50.43	Door
38 Bath Road	Stroud	Stroud	385660	204330	60	350	50.6	C.F.
Usterville	Stroud	Stroud	386100	203140	630	300	50.6	Door
Carpets of Worth	Thrupp	Stroud	385950	203490	140	311A	50.9	Door
Studio 33 Health Club	Thrupp	Stroud	386070	203160	90	301	51.05	Door
Carpets of Worth	Thrupp	Stroud	386170	203130	200	302	51.11	Door
Thrupp Methodist Church	Thrupp	Stroud						

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19 Thrupp Industrial Estate - Caravan site	20 Private	386325	202725	0	229	53.82	Door
4 Thrupp Industrial Estate - Caravan site	20 Private	386325	202725	0	242	53.94	Door
12 Thrupp Industrial Estate - Caravan site	20 Private	386325	202725	0	234	53.94	Door
Berryfield	20 Private	386350	204530	250	390	53.98	Door
3 Hope Mill Cottage	18 Private	386370	202870	75	203	54.11	Door
3 Bath Road	20 Private	386470	204820	40	505	54.19	Door
Cousins & Matthews Ltd	20 Industrial	386410	202840	110	211	54.23	Door
Shed Valley Press	20 Industrial	386320	202860	225	269	54.26	Door
5 Thrupp Industrial Estate - Caravan site	20 Private	386325	202725	0	243	54.26	Door
Shed Valley Press	20 Industrial	386300	202920	25	268	54.27	Door
14 Thrupp Industrial Estate - Caravan park	20 Private	386325	202725	0	231	54.27	Door
The British Oak	18 Public House	385780	204350	600	384	54.29	Door
Stroud District Council	20 Council	385320	202830	98	271	54.31	Door
5 Bath Road	20 Private	386470	204810	40	504	54.32	Door
15 Thrupp Industrial Estate - Caravan site	20 Private	386325	202725	0	227	54.33	Door
12A Thrupp Industrial Estate - Caravan site	20 Private	386325	202725	0	233	54.35	Door
Kimbrey & Hogg	20 Industrial	386390	202350	280	191	54.35	Door
Unit 4 (Empty) Thrupp Industrial Estate	20 Disused	386410	202870	15	225	54.37	Door
Unit 5 (Empty) Thrupp Industrial Estate	20 Disused	386410	202860	15	224	54.37	Door
Unit 8	20 Disused	386410	202860	15	221	54.37	Door
Ex-Clothing Factory	20 Empty	384050	205050	440	441	54.37	Door
Unit 6	20 Disused	386410	202860	15	223	54.37	Door
Unit 7	20 Disused	386410	202860	15	222	54.37	Door
Unit 9	20 Disused	386410	202860	15	220	54.37	Door
Unit 10 (Empty)	20 Disused	386420	202850	15	219	54.37	Door
Unit 11	20 Industrial	386420	202850	15	218	54.38	Door
Cousins & Matthews Ltd	20 Industrial	386440	202800	850	212	54.4	Door
Cousins & Matthews Ltd	20 Industrial	386420	202830	85	213	54.41	Door
2 Hope Mill Cottage	18 Private	386360	202870	40	202	54.43	Door
Alan Sutton Publishing	20 Industrial	386290	202870	450	270	54.45	Door
Fairways	20 Private	384430	204890	55	498	54.47	Door
Forbes	20 Private	385640	204550	300	391	54.49	D.P.C.
Cousins & Matthews Ltd	20 Industrial	386400	202850	110	210	54.55	Door
1 Hope Mill Cottage	18 Private	386360	202840	50	201	54.62	Door
Cousins & Matthews Ltd Thrupp Industrial Estate	20 Industrial	386380	202840	40	208	54.64	Door
Relocroft	20 Private	385530	204870	300	393	54.66	D.P.C.
Well Close	16 Private	385710	204230	180	347	54.67	Door
Autocraft	20 Industrial	386810	202550	280	190	54.67	Door
Unit 14	20 Disused	386450	202800	60	216	54.68	Door
Unit 12	20 Industrial	386430	202810	60	214	54.68	Door
Unit 13	20 Industrial	386440	202810	60	215	54.68	Door
Unit 15	20 Industrial	386450	202800	60	217	54.69	Door
The Chapel	20 Private	385680	204280	125	349	54.71	Door
16 Thrupp Industrial Estate - Caravan site	20 Private	386325	202725	0	226	54.75	Door
8 Thrupp Industrial Estate - Caravan site	20 Private	386325	202725	0	244	54.75	Door
Cross-Point Systems Brimscombe	20 Industrial	386370	202450	100	194	54.76	Door
Cross-Point Systems	20 Industrial	386580	202450	100	193	54.77	Door
Cousins & Matthews Ltd	20 Industrial	386390	202830	50	209	54.9	Door
Cross-Point Systems	20 Industrial	386590	202470	800	192	54.97	Door
7 Thrupp Industrial Estate - Caravan site	20 Private	386325	202725	0	245	55.06	Door
8 Thrupp Industrial Estate - Caravan site	20 Private	386325	202725	0	246	55.07	Door
9 Bath Road	20 Private	384460	204810	40	502	55.14	Door
7 Bath Road	20 Private	384460	204800	40	503	55.15	Door
11 Bath Road	20 Private	384460	204800	40	501	55.18	Door

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Brookleigh House	High Street	Chalford	19 Private	380840	202550	65	50	74.45	Window	PROF
SI	Armed Cottage	Chalford	17 Private	380630	202540	50	64	74.48	Door	
Brookside		2 High Street	17 Private	390035	202560	40	29	74.49	Door	PROF
Brookside		1 High Street	17 Private	390025	202560	40	30	74.67	Door	PROF
The Workshop	High Street	Chalford	19 Private	388870	202550	45	47	74.83	Door	
Thornel House	High Street	Chalford	18 Private	389870	202550	50	72	74.82	Door	
The Cottage	High Street	Chalford	19 Private	388890	202570	60	46	74.98	Door	PROF
Concombe View	High Street	Chalford	19 Private	388925	202375	30	43	75.16	Door	
Frome Lodge	Chalford		20 Private	389445	202530	60	38	75.4	Door	
Garage to Old Red Lion	Chalford		19 Private	389870	202560	45	48	75.5	Door	
Riverdale	High Street	Chalford	19 Private	390110	202550	50	62	75.51	C.F.	
Valley House	High Street	Chalford	17 Private	389620	202540	55	63	75.78	Door	
Chalford Post Office	High Street	Chalford	18 Private	390035	202575	45	26	75.86	Door	
Sarogen	Chalford		17 Private	390125	202545	50	33	75.97	Door	
2 Anchor Terrace	High Street	Chalford	17 Private	389970	202555	100	28	76.82	Door	
Spring House	High Street	Chalford	17 Private	390120	202545	50	32	76.82	Door	
1 Anchor Terrace	High Street	Chalford	17 Private	390130	202545	50	34	76.83	Door	
3 Anchor Terrace	High Street	Chalford	20 Private/Public	389810	202560	20	57	76.88	C.V.	
Garage to Church	Chalford		19 Private	389870	202570	100	49	77.12	Window	
Old Red Lion	Chalford		17 Public	389800	202560	45	58	77.26	Door	
Seven-day Adventist Church	Chalford		19 Private	389960	202505	35	35	77.36	Door	
1 Meadow View Cottages	Chalford		19 Private	389965	202515	45	1657	77.43	Door	
2 Meadow View Cottages	Chalford		17 Private	389925	202475	45	14	77.57	Door	
Garage	Chalford		17 Private	389900	202580	65	42	77.7	Door	
Tenants Spring House	High Street	Chalford	18 Private	390360	202520	15	6	77.78	Door	
Sedens Cottage	High Street	Chalford	17 Private	390350	202315	45	5	77.87	Door	PROF
2 Journeys End	Chalford		17 Private	389630	202560	20	53	77.88	Door	
Journeys End	High Street	Chalford	17 Private	390025	202315	50	37	77.82	Door	
The Gardener's Cottage	High Street	Chalford	17 Private	389820	202580	15	58	77.92	Door	
6 Meadow View Cottages	Chalford		17 Private	390155	202510	25	85	77.94	Door	
Anyocore	High Street	Chalford	19 Private	389875	202515	45	1658	77.97	Door	
Sedens Mill	Chalford		19 Private	389935	202510	30	36	77.98	Door	
4 Meadow View Cottages	Chalford		18 Private	389985	202565	84	1871	78.12	Door	
5 Meadow View Cottages	Chalford		17 Private	390015	202515	45	1659	78.12	Door	
3 Meadow View Cottages	Chalford		17 Private	390005	202585	95	27	78.13	C.V.	
Tenard House	High Street	Chalford	17 Private	389860	202520	30	51	78.16	Door	
Riverdale	High Street	Chalford	17 Private	390330	202510	32	4	78.3	Door	
Kidley Mill Cottage	High Street	Chalford	17 Private	390170	202495	35	16	78.36	Door	
Garage	High Street	Chalford	17 Private	390370	202535	12	7	78.38	Door	
Promeside	2nd	Chalford	17 Private	390325	202510	36	3	78.41	Door	
Services House	High Street	Chalford	17 Private	390180	202495	40	17	78.52	Door	
Promeside	High Street	Chalford	17 Private	390320	202505	36	2	78.67	Door	
The Bungalow Garage	High Street	Chalford	17 Private/Farm	390675	202720	40	10	78.69	Door	PROF
Ashmeads House	Golden Valley	Chalford	20 Private	390825	202765	94	1673	78.82	Door	PROF
Cynus Cottage	High Street	Chalford	17 Private	390100	202565	45	22	78.89	Door	
Garages	High Street	Chalford	17 Private	390110	202560	25	21	78.94	Door	
Ashmeads (cottage)	Golden Valley	Chalford	20 Private	390125	202560	40	19	78.98	Door	
Endale Garage	High Street	Chalford	18 Private	390885	202775	156	1674	79.52	Door	
Apocalypse	High Street	Chalford	17 Private	390330	202525	21	8	79.71	Door	
The Old Valley Inn (Ex Pub)	High Street	Chalford	19 Private	389740	202560	25	60	79.77	Door	
7 High Street	Chalford		17 Private	390400	202480	63	12	78.91	C.F.	
Moors House	High Street	Chalford	17 Private	390055	202580	35	23	80.09	Door	
Endale	High Street	Chalford	17 Private	390065	202580	35	24	80.09	Door	
The Valley	Chalford		17 Private	390320	202520	25	9	80.57	Door	
Avalon Cottage	High Street	Chalford	18 Private	390210	202495	55	13	80.57	Door	
Corner Cottage	High St	Chalford	17 Private	390140	202560	50	20	80.78	D.P.C	
The Bungalow	High Street	Chalford	17 Private	390310	202520	25	1	80.95	Door	
Horns Shelter	High Street	Chalford	17 Private/Farm	390655	202715	100	11	81.3	C.F.	
Anchor House	High Street	Chalford	19 Private	391185	202935	20	1675	81.82	Door	
Unknown Address	Chalford		17 Private	390170	202525	55	18	82.11	Door	
Bakers Mill Lodge	Golden Valley	Chalford	17 Private	390205	202485	55	1655	83.02	Door	
Bakers Mill	Golden Valley	Chalford	18 Private	391515	202615	40	1677	83.05	Door	PROF
Stable	Golden Valley	Chalford	18 Private	391525	202605	92	1676	83.16	Door	PROF
Unknown Address	Chalford		20 Horse Shelter	391475	202895	70	1678	83.55	Door	
2 High Street	Chalford		18 Private	389715	202575	60	1672	84.42	Door	
Buddswell House	Chalford		17 Private	389660	202560	40	61	84.98	C.F.	
Hillview	Chalford		17 Private	390235	202485	60	1654	85.28	Door	
Green Court	Chalford		18 Private	390335	202545	40	1670	87.44	Door	
Whitash Lock House	Chalford		17 Private	390285	202495	190	1656	88.8	Door	
Puck's Mill House	Chalford		18 Private	392335	202985	50	1683	90.67	Door	PROF
Puck's Mill (barnside)	Chalford		18 Private	392105	202815	78	1679	90.73	Door	PROF
Puck's Mill (Victorian House)	Chalford		20 Private	392125	202825	45	1680	91.51	Door	PROF
Whitash Lock House	Chalford		19 Private	392165	202965	72	1681	92.27	Door	PROF
				392275	202875	30	1682	92.95	Door	PROF

Appendix 3

Sensitivity test maximum water levels

Section Label	100 Year Event (original)		100 Year Event + 10% flow		100 Year Event + 20% flow		100 Year Event -10% coeffs		100 Year Event - 20% coeffs	
	Level (mOD)	Flow (m³/s)	Level (mOD)	Flow (m³/s)	Level (mOD)	Flow (m³/s)	Level (mOD)	Flow (m³/s)	Level (mOD)	Flow (m³/s)
RFA_001	7.49	17.6	7.49	19.9	7.49	23.8	7.49	16.6	7.49	15.7
River Severn Tidal Outfall										
RFA_001A	7.64	17.5	7.66	19.9	7.74	23.7	7.65	16.6	7.66	15.7
RFA_002	7.68	17.2	7.71	19.6	7.81	23.5	7.69	16.2	7.69	15.6
Upper Framlode Weir										
RFA_003	8.06	17.1	8.12	19.6	8.31	23.5	8.09	16.2	8.10	15.6
RFA_004	8.11	17.0	8.18	19.5	8.39	23.5	8.13	16.1	8.14	15.5
RFA_005	8.18	17.0	8.27	19.3	8.49	23.4	8.19	16.0	8.19	15.5
Junction with RFB_001										
RFA_006	8.18	8.0	8.27	9.4	8.49	11.7	8.19	7.4	8.19	7.0
RFA_007	8.21	8.0	8.31	9.3	8.53	11.7	8.22	7.4	8.21	7.0
RFA_008	8.25	8.0	8.35	9.3	8.57	11.6	8.25	7.4	8.24	7.0
RFA_008A	8.22	8.0	8.32	9.3	8.53	11.6	8.23	7.4	8.22	7.0
Gloucester & Sharpness Canal - Left Syphon										
RFA_009	8.34	8.0	8.50	9.3	8.82	11.6	8.35	7.4	8.36	7.0
RFA_010	8.42	8.0	8.59	9.2	8.95	10.3	8.42	7.4	8.42	7.0
RFA_011	8.43	8.0	8.62	8.3	8.96	8.5	8.43	7.4	8.43	7.0
RFA_012	8.48	8.0	8.66	8.3	8.98	8.6	8.47	7.4	8.46	7.0
Whitminster Weir - Left										
RFA_013	8.60	8.0	8.75	8.3	9.03	8.6	8.60	7.4	8.61	7.0
Junction with RFB_008										
RFA_014	8.60	17.5	8.75	19.0	9.03	23.4	8.60	16.3	8.61	15.6
RFA_015	8.59	17.5	8.74	19.0	9.01	23.4	8.59	16.3	8.60	15.6
Whitminster Bridge										

RFA_016	8.59	17.5	8.74	19.0	9.03	23.4	8.59	16.3	8.61	15.6
RFA_017	8.64	17.5	8.78	19.0	9.06	23.5	8.63	16.3	8.64	15.6
RFA_018	8.65	17.5	8.80	19.0	9.08	23.5	8.65	16.3	8.66	15.6
Wheatenhurst Sluices										
RFA_019	10.11	17.5	10.21	19.0	10.35	23.5	10.12	16.3	10.25	15.6
RFA_020	10.11	17.5	10.22	19.0	10.37	23.5	10.13	16.3	10.26	15.6
RFA_021	10.25	17.5	10.31	19.0	10.47	23.5	10.25	16.3	10.29	15.6
RFA_022	10.37	17.5	10.44	19.0	10.61	23.5	10.35	16.3	10.35	15.6
RFA_023	10.42	17.5	10.49	19.0	10.66	23.5	10.40	16.3	10.40	15.6
Walk Rhine Bridge										
RFA_024	10.47	17.5	10.54	19.0	10.73	23.5	10.44	16.3	10.44	15.6
RFA_025	10.55	17.5	10.63	17.9	10.84	18.4	10.52	16.3	10.51	15.2
RFA_026	10.60	17.5	10.67	17.9	10.87	18.4	10.56	16.3	10.54	15.2
RFA_027	10.66	17.5	10.71	18.0	10.90	18.4	10.62	16.3	10.59	15.2
RFA_028	10.76	17.5	10.78	18.0	10.95	18.5	10.71	16.4	10.67	15.2
RFA_029	10.86	17.5	10.89	18.0	11.02	18.5	10.82	16.4	10.77	15.2
RFA_030	10.97	17.5	10.99	18.0	11.09	18.5	10.92	16.4	10.86	15.2
RFA_031	11.03	17.5	11.06	18.0	11.13	18.5	10.98	16.4	10.93	15.2
RFA_032	11.11	17.5	11.14	18.0	11.20	18.5	11.06	16.4	11.00	15.2
Frombridge Mill										
RFA_033	12.46	17.5	12.47	18.0	12.49	18.5	12.48	16.4	12.50	15.2
RFA_034	12.48	17.5	12.49	18.0	12.51	18.5	12.50	16.4	12.52	15.2
A38 Road Bridge										
RFA_035	12.56	17.5	12.58	18.0	12.60	18.5	12.58	16.4	12.59	15.2
RFA_036	12.58	23.5	12.60	24.9	12.62	25.5	12.59	23.2	12.59	23.1
RFA_037	12.61	24.6	12.63	26.6	12.65	27.5	12.62	24.6	12.63	24.9

RFA_038	12.66	29.7	12.67	33.6	12.69	35.5	12.66	30.2	12.67	31.3
RFA_039	12.71	29.7	12.74	33.6	12.75	35.5	12.72	30.1	12.73	31.3
M5 Road Bridge										
RFA_040	12.78	29.7	12.83	33.6	12.85	35.4	12.79	30.1	12.81	31.3
RFA_041	12.98	28.1	13.06	30.5	13.10	31.3	12.99	28.8	13.02	28.3
RFA_042	13.19	21.4	13.28	22.0	13.32	22.2	13.21	22.4	13.23	19.9
RFA_043	13.27	21.4	13.35	22.0	13.39	22.2	13.29	22.5	13.29	19.9
Meadow Mill Wall										
RFA_044	14.43	21.4	14.45	22.0	14.46	22.2	14.41	22.5	14.44	19.9
RFA_045	14.40	36.3	14.41	38.6	14.42	39.4	14.38	36.5	14.41	35.8
RFA_046	14.48	36.4	14.50	39.0	14.51	40.1	14.47	36.6	14.48	36.0
Junction with RFC_001										
RFA_047	14.48	34.9	14.50	37.5	14.51	38.6	14.47	35.1	14.48	34.5
RFA_048	14.67	34.9	14.72	37.5	14.73	38.6	14.67	35.1	14.68	34.5
Meadow Bridge										
RFA_049	14.78	34.9	14.91	37.5	14.97	38.6	14.79	35.1	14.79	34.5
Junction with RFD_001										
RFA_050	14.78	19.3	14.91	20.0	14.97	19.9	14.79	19.5	14.79	19.3
RFA_051	14.90	12.7	15.00	12.7	15.05	13.0	14.91	12.7	14.91	12.6
RFA_052	15.00	11.4	15.08	11.3	15.12	11.2	15.00	11.3	15.00	11.2
RFA_053	15.05	6.8	15.11	6.8	15.15	6.8	15.05	6.7	15.05	6.6
Millend Mills Sluices										
RFA_054	15.80	6.8	15.80	6.8	15.81	6.8	15.92	6.7	16.01	6.6
RFA_055	15.99	6.7	16.00	6.8	16.00	6.8	16.05	6.7	16.11	6.6
RFA_056	16.18	6.7	16.18	6.8	16.18	6.8	16.20	6.7	16.23	6.6
RFA_057	16.32	6.7	16.32	6.8	16.32	6.8	16.33	6.7	16.34	6.6

RFA_058	16.44	6.7	16.44	6.8	16.44	6.8	16.44	6.8	16.44	6.7	16.45	6.6
RFA_059	16.56	6.8	16.56	6.9	16.56	6.9	16.56	6.9	16.56	6.9	16.56	6.8
RFA_060	16.64	8.8	16.65	8.9	16.65	9.0	16.65	9.0	16.65	8.9	16.65	8.9
RFA_061	16.79	8.8	16.80	8.9	16.80	9.0	16.80	9.0	16.80	8.8	16.80	8.9
RFA_062	16.95	9.0	16.96	9.3	16.96	9.5	16.96	9.5	16.96	9.2	16.96	9.2
RFA_063	17.10	9.2	17.11	9.5	17.11	9.8	17.11	9.8	17.10	9.4	17.10	9.4
RFA_064	17.24	8.9	17.26	9.0	17.28	9.1	17.28	9.1	17.25	9.0	17.26	9.0
RFA_065	17.42	9.2	17.43	9.3	17.44	9.4	17.44	9.4	17.42	9.3	17.43	9.3
RFA_066	17.59	7.5	17.60	7.5	17.61	7.5	17.61	7.5	17.60	7.5	17.60	7.4
RFA_067	17.64	9.1	17.65	9.0	17.65	9.0	17.65	9.0	17.64	9.0	17.64	8.9
RFA_068	17.75	11.3	17.75	11.3	17.75	11.4	17.75	11.4	17.75	11.2	17.75	11.2
RFA_069	18.03	11.7	18.03	11.9	18.03	12.0	18.03	12.0	18.03	11.7	18.02	11.5
RFA_070	18.21	15.8	18.21	16.2	18.22	16.5	18.22	16.5	18.21	15.7	18.21	15.4
RFA_071	18.54	17.1	18.55	18.0	18.56	18.6	18.56	18.6	18.54	16.9	18.53	16.3
Junction with RFF_001												
RFA_072	18.54	16.5	18.55	17.3	18.56	17.8	18.56	17.8	18.54	16.2	18.53	15.7
RFA_073	18.80	16.5	18.82	17.3	18.84	17.8	18.84	17.8	18.79	16.2	18.77	15.7
RFA_074	18.89	17.4	18.91	18.6	18.92	19.5	18.92	19.5	18.88	17.0	18.86	16.2
Beards Mill Bridge												
RFA_075	19.19	17.4	19.26	18.6	19.31	19.5	19.31	19.5	19.21	17.0	19.19	16.2
RFA_076	19.31	12.3	19.38	12.9	19.43	13.4	19.43	13.4	19.32	11.6	19.30	10.8
Beards Mill Side Weir												
RFA_077	20.44	12.3	20.49	12.9	20.52	13.4	20.52	13.4	20.49	11.6	20.52	10.8
Junction with RFF_003												
RFA_078	20.44	12.9	20.49	13.6	20.52	14.2	20.52	14.2	20.49	12.3	20.52	11.4

RFA_078A	20.51	12.9	20.55	14.0	20.59	14.8	20.54	13.0	20.56	12.8
RFA_079	20.66	6.1	20.71	6.1	20.75	6.1	20.68	6.0	20.69	5.9
RFA_080	20.69	6.5	20.75	6.6	20.79	6.6	20.71	6.4	20.72	6.3
RFA_081	20.71	6.5	20.76	6.5	20.80	6.6	20.73	6.4	20.74	6.3
RFA_082	20.77	7.1	20.81	7.3	20.84	7.5	20.78	6.9	20.78	6.6
RFA_083	20.92	7.1	20.95	7.3	20.98	7.4	20.92	6.9	20.91	6.6
RFA_084	21.08	7.1	21.09	7.2	21.11	7.4	21.06	6.9	21.04	6.6
RFA_085	21.19	7.0	21.21	7.2	21.22	7.4	21.18	6.9	21.16	6.6
RFA_086	21.46	7.0	21.47	7.2	21.48	7.3	21.45	6.8	21.42	6.5
RFA_087	21.78	7.0	21.79	7.1	21.80	7.3	21.77	6.8	21.74	6.5
Stanley Downton Bridge										
RFA_088	21.82	7.0	21.83	7.1	21.84	7.3	21.81	6.8	21.78	6.5
RFA_089	22.09	7.0	22.11	7.1	22.12	7.2	22.08	6.8	22.05	6.5
Stanley Downton Mill Race										
RFA_090	22.55	7.0	22.56	7.1	22.58	7.2	22.60	6.8	22.66	6.5
RFA_091	22.77	6.9	22.78	7.1	22.80	7.2	22.79	6.8	22.81	6.4
RFA_092	22.85	6.9	22.87	7.1	22.88	7.2	22.86	6.7	22.88	6.4
RFA_093	22.93	6.9	22.95	7.0	22.96	7.1	22.94	6.7	22.94	6.4
RFA_094	23.02	6.9	23.03	7.0	23.05	7.1	23.02	6.7	23.01	6.3
RFA_095	23.12	6.8	23.13	7.0	23.14	7.1	23.11	6.6	23.10	6.3
RFA_096	23.20	6.8	23.21	6.9	23.23	7.0	23.19	6.6	23.17	6.3
RFA_097	23.29	6.8	23.30	6.9	23.32	7.0	23.28	6.6	23.26	6.2
RFA_098	23.39	6.7	23.41	6.8	23.42	6.9	23.38	6.5	23.36	6.2
RFA_099	23.45	6.7	23.47	6.8	23.47	6.9	23.44	6.5	23.42	6.2
Junction with RFM_001										
RFA_100	23.45	6.7	23.47	6.8	23.47	6.9	23.44	6.5	23.42	6.2

RFA_101	23.63	6.7	23.64	6.8	23.64	6.9	23.61	6.5	23.59	6.2
RFA_102	23.91	6.7	23.91	6.8	23.92	6.9	23.89	6.5	23.86	6.1
RFA_103	24.21	6.6	24.22	6.7	24.23	6.8	24.19	6.4	24.17	6.1
Stanley Mills Weir										
RFA_104	28.16	6.6	28.17	6.7	28.17	6.8	28.19	6.4	28.22	6.1
RFA_105	28.17	6.6	28.18	6.7	28.18	6.8	28.20	6.4	28.23	6.1
Stanley Mills Bridge										
RFA_106	28.18	6.6	28.18	6.7	28.19	6.8	28.21	6.4	28.24	6.1
RFA_107	28.24	6.6	28.25	6.7	28.25	6.8	28.26	6.4	28.28	6.0
RFA_108	28.27	6.6	28.27	6.7	28.28	6.7	28.29	6.3	28.30	6.1
RFA_109	28.29	6.5	28.29	6.6	28.30	6.7	28.30	6.3	28.32	6.1
RFA_110	28.30	6.6	28.31	6.6	28.32	6.7	28.32	6.3	28.33	6.1
RFA_111	28.32	6.6	28.33	6.6	28.34	6.7	28.34	6.3	28.35	6.1
RFA_112	28.35	5.9	28.36	5.9	28.37	5.9	28.37	5.6	28.38	5.2
RFA_113	28.37	4.9	28.38	4.8	28.38	4.7	28.38	4.7	28.39	4.3
RFA_114	28.40	7.5	28.41	7.8	28.42	8.0	28.41	7.5	28.42	7.5
Redhill Bridge										
RFA_115	28.56	7.5	28.58	7.8	28.60	8.0	28.58	7.5	28.60	7.5
RFA_116	28.61	7.5	28.63	7.8	28.65	8.0	28.63	7.4	28.65	7.5
RFA_117	28.70	16.7	28.73	18.5	28.75	20.0	28.72	17.6	28.74	18.8
RFA_118	29.02	15.9	29.10	17.2	29.16	18.7	29.07	16.1	29.13	16.4
Refuse Tip Weir 1										
RFA_119	29.45	15.9	29.50	17.2	29.56	18.6	29.53	16.1	29.62	16.4
Junction with RFD_081										
RFA_120	29.45	37.0	29.50	39.6	29.56	42.3	29.53	36.8	29.62	36.7
RFA_121	29.80	37.0	29.85	39.7	29.91	42.3	29.81	36.8	29.85	36.7

Junction with RFH_001										
RFA_122	29.80	21.2	29.85	23.0	29.91	25.0	29.81	21.2	29.85	21.7
RFA_123	29.85	19.0	29.90	20.4	29.95	22.1	29.86	19.0	29.89	19.6
RFA_124	29.89	19.2	29.95	20.3	30.01	21.8	29.90	18.9	29.94	19.3
RFA_125	29.98	10.9	30.04	10.9	30.09	11.0	29.99	10.2	30.02	9.5
Ebley Corn Mill Bypass										
RFA_126	30.32	11.0	30.35	11.0	30.38	11.0	30.35	10.3	30.39	9.6
Junction with RFH_004										
RFA_127	30.32	26.4	30.35	26.9	30.38	26.9	30.35	24.9	30.39	23.1
RFA_128	30.30	29.0	30.32	30.0	30.35	30.1	30.32	28.3	30.35	27.1
Ebley Corn Mill Bridge										
RFA_129	30.48	29.1	30.52	30.3	30.59	30.3	30.51	28.5	30.57	27.1
RFA_130	30.66	26.8	30.69	27.5	30.73	28.0	30.67	26.5	30.70	25.6
RFA_131	30.82	56.4	30.82	55.5	30.82	55.6	30.82	56.4	30.75	31.1
RFA_132	30.83	35.9	30.86	37.8	30.89	39.7	30.84	35.6	30.85	35.5
RFA_133	31.11	36.8	31.14	39.8	31.17	42.3	31.11	36.8	31.11	36.7
RFA_134	31.31	37.4	31.36	39.7	31.40	42.3	31.31	36.8	31.31	36.7
RFA_135	31.28	28.5	31.34	29.8	31.39	30.4	31.28	27.9	31.29	26.5
Ebley Mill Bridge										
RFA_136	31.30	28.5	31.36	29.9	31.41	30.4	31.30	27.9	31.31	26.5
RFA_137	31.45	28.4	31.52	29.5	31.57	30.4	31.46	27.6	31.45	26.4
Ebley Mill Weir										
RFA_138	32.15	28.4	32.17	29.5	32.20	30.4	32.20	27.6	32.26	26.4
RFA_139	32.20	28.4	32.22	29.4	32.25	30.4	32.24	27.5	32.29	26.4
RFA_140	32.40	30.7	32.43	32.8	32.44	34.6	32.42	30.4	32.43	30.0
Junction with SCA_001										

RFA_141	32.40	19.5	32.43	20.2	32.44	20.7	32.42	19.2	32.43	18.7
RFA_142	32.46	23.6	32.47	24.3	32.49	25.3	32.46	23.6	32.47	23.5
RFA_143	32.73	24.5	32.74	25.6	32.76	27.0	32.73	24.5	32.73	24.4
RFA_144	32.69	24.5	32.71	25.6	32.72	27.0	32.69	24.5	32.69	24.4
Junction with RFX_001										
RFA_145	32.69	10.9	32.71	11.6	32.72	12.1	32.69	10.9	32.69	11.0
Dudbridge Road Culvert										
RFA_146	32.85	10.8	32.89	11.6	32.91	12.1	32.88	10.9	32.92	10.9
RFA_147	32.93	10.8	32.97	11.6	32.99	12.1	32.95	10.9	32.98	10.9
Redlers Mill Sluices										
RFA_148	34.71	10.8	34.74	11.6	34.76	12.1	34.76	10.8	34.80	10.9
RFA_149	34.71	10.8	34.74	11.6	34.75	12.1	34.75	10.8	34.80	10.9
RFA_150	34.72	10.8	34.75	11.6	34.77	12.1	34.76	10.8	34.81	10.8
RFA_151	34.91	10.8	34.95	11.5	34.97	12.0	34.93	10.8	34.96	10.8
RFA_152	35.10	10.7	35.15	11.5	35.18	12.0	35.12	10.7	35.14	10.8
RFA_153	35.15	10.7	35.20	11.5	35.23	12.0	35.16	10.7	35.18	10.8
Junction with RFX_001										
RFA_154	35.15	8.6	35.20	9.3	35.23	9.8	35.16	8.8	35.18	9.0
RFA_155	35.25	8.6	35.30	9.3	35.33	9.8	35.28	8.7	35.28	9.0
RFA_156	35.35	8.5	35.40	9.3	35.43	9.7	35.36	8.7	35.38	8.9
Fromehall Mill Bypass Sluices										
RFA_157	36.44	8.5	36.48	9.3	36.51	9.7	36.50	8.6	36.56	8.9
RFA_158	36.53	5.9	36.58	6.0	36.61	6.0	36.58	5.6	36.64	5.4
RFA_159	36.55	5.9	36.60	5.9	36.63	5.9	36.60	5.6	36.65	5.4
Fromehall Mill Bridge										
RFA_160	36.83	5.9	36.86	5.9	36.88	5.9	36.86	5.6	36.88	5.4

RFA_161	36.83	6.7	36.86	7.0	36.88	7.2	36.85	6.6	36.87	6.5
Junction with RFN_006										
RFA_162	36.83	8.8	36.86	9.1	36.88	9.5	36.85	8.5	36.87	8.2
RFA_163	36.86	10.6	36.88	11.4	36.90	12.0	36.87	10.6	36.89	10.5
RFA_163A	36.91	10.6	36.94	11.3	36.96	12.0	36.92	10.5	36.94	10.5
Lodgemore Mills Bridge										
RFA_164	36.95	10.6	36.99	11.3	37.01	12.1	36.97	10.5	36.98	10.5
RFA_165	36.96	10.6	37.00	11.3	37.02	12.0	36.98	10.5	36.99	10.5
Lodgemore Mills Sluices										
RFA_166	38.25	10.6	38.35	11.3	38.41	12.0	38.30	10.5	38.36	10.5
RFA_167	38.24	10.6	38.34	11.3	38.40	12.0	38.29	10.5	38.35	10.5
Lodgemore Mills Culvert										
RFA_168	38.90	10.6	38.99	11.3	39.05	11.9	38.89	10.5	38.87	10.5
RFA_169	38.91	10.6	39.00	11.3	39.06	12.0	38.89	10.5	38.88	10.5
RFA_170	38.96	10.7	39.05	11.3	39.11	11.8	38.95	10.7	38.93	10.7
Bath Road Bridge										
RFA_171	38.97	10.7	39.06	11.3	39.11	11.8	38.96	10.7	38.94	10.7
RFA_172	38.97	10.7	39.05	11.3	39.11	11.8	38.96	10.7	38.94	10.7
RFA_173	39.11	10.7	39.19	11.3	39.24	11.7	39.10	10.7	39.09	10.7
RFA_174	39.25	10.7	39.31	11.3	39.35	11.7	39.24	10.7	39.24	10.7
RFA_175	39.56	10.7	39.60	11.2	39.63	11.7	39.56	10.7	39.55	10.7
RFB_001	8.18	9.1	8.27	10.0	8.49	11.7	8.19	8.6	8.19	8.4
RFB_002	8.25	9.1	8.35	9.9	8.57	11.7	8.25	8.6	8.25	8.4
RFB_003	8.30	9.1	8.40	9.8	8.62	11.6	8.29	8.6	8.28	8.4
Gloucester & Sharpness Canal - Right Syphon										
RFB_004	8.43	9.1	8.58	9.8	8.89	11.6	8.44	8.6	8.45	8.4

RFB_005	8.50	9.0	8.66	9.1	8.96	8.50	8.6	8.52	8.1
RFB_006	8.54	9.6	8.68	11.7	8.98	8.54	9.2	8.55	9.1
RFB_007	8.57	9.6	8.71	11.7	8.99	8.56	9.2	8.58	9.1
Whitminster Weir - Right									
RFB_008	8.60	9.6	8.75	11.7	9.03	8.60	9.2	8.61	9.1
RFC_001	14.48	2.9	14.50	2.9	14.51	14.47	2.8	14.48	2.6
Carevan Park Weir									
RFC_001A	14.50	2.9	14.52	2.9	14.53	14.49	2.8	14.51	2.6
RFC_002	14.50	2.8	14.52	2.8	14.53	14.49	2.7	14.51	2.6
Spring Hill Bridge									
RFC_003	14.85	2.8	14.86	2.8	14.87	14.85	2.7	14.86	2.6
RFC_004	14.85	2.6	14.87	2.5	14.88	14.85	2.3	14.87	2.2
RFC_005	14.86	2.6	14.87	2.5	14.88	14.86	2.3	14.87	2.2
Churchend School Bridge									
RFC_006	15.47	2.5	15.47	2.4	15.48	15.48	2.2	15.48	2.2
RFC_007	15.47	1.9	15.48	1.9	15.48	15.48	1.8	15.49	1.7
Churchend School Weir									
RFC_008	15.65	1.9	15.65	1.9	15.66	15.68	1.8	15.70	1.7
RFC_009	15.71	1.9	15.72	1.9	15.72	15.73	1.8	15.75	1.7
RFD_001	14.78	15.6	14.91	17.5	14.97	14.79	15.6	14.79	15.3
RFD_002	14.87	6.7	14.99	8.4	15.05	14.88	6.6	14.88	6.3
RFD_003	14.88	6.1	15.01	6.2	15.07	14.89	5.9	14.89	5.7
Milford Lane Bridge									
RFD_004	14.99	6.1	15.12	6.2	15.19	15.00	5.9	15.00	5.7
RFD_005	15.00	6.1	15.13	6.2	15.19	15.01	5.9	15.01	5.6
Junction with RFE_001									

RFD_006	15.00	3.6	15.13	3.6	15.19	3.6	15.01	3.3	15.01	3.0
RFD_007	14.99	3.6	15.12	3.6	15.18	3.6	15.00	3.3	15.00	3.0
RFD_008	15.71	3.6	15.72	3.6	15.72	3.6	15.73	3.3	15.75	3.0
Junction with RFC_009										
RFD_008A	15.71	5.4	15.72	5.4	15.72	5.4	15.73	5.1	15.75	4.7
RFD_009	15.78	6.6	15.78	6.6	15.79	6.6	15.79	6.4	15.80	6.3
RFD_010	15.90	7.0	15.90	7.0	15.90	7.0	15.90	6.8	15.90	6.6
RFD_011	16.00	7.0	16.00	7.0	16.00	7.0	16.00	6.8	15.99	6.6
Junction with RFE_005										
RFD_012	16.00	7.6	16.00	7.6	16.00	7.6	16.00	7.3	15.99	7.0
RFD_013	16.10	9.1	16.11	9.2	16.11	9.2	16.10	8.6	16.09	7.9
RFD_014	16.23	9.1	16.23	9.2	16.23	9.2	16.21	8.5	16.19	7.9
RFD_015	16.41	9.1	16.41	9.1	16.42	9.2	16.38	8.5	16.35	7.8
RFD_016	16.58	9.1	16.59	9.1	16.59	9.2	16.55	8.5	16.52	7.8
RFD_017	16.76	9.1	16.76	9.1	16.76	9.1	16.73	8.5	16.69	7.8
Junction with RFG_001										
RFD_018	16.76	6.9	16.76	6.9	16.76	6.9	16.73	6.4	16.69	5.9
RFD_019	16.99	6.9	16.99	6.9	16.99	6.9	16.95	6.4	16.91	5.9
Bonds Mill Culvert										
RFD_020	19.22	6.9	19.22	6.9	19.23	6.9	19.26	6.4	19.30	5.9
Junction with RFG_006										
RFD_021	19.22	9.1	19.22	9.1	19.23	9.1	19.26	8.5	19.30	7.8
RFD_022	19.29	9.1	19.30	9.1	19.30	9.1	19.32	8.5	19.34	7.8
RFD_023	19.36	9.2	19.36	9.2	19.36	9.3	19.37	8.7	19.38	8.3
RFD_024	19.43	10.1	19.43	10.3	19.43	10.4	19.43	9.8	19.43	9.4
RFD_025	19.50	12.3	19.51	12.6	19.51	12.8	19.50	12.0	19.50	11.6

GWR Bridge									
RFD_026	19.93	12.3	19.95	12.6	19.96	12.8	19.94	12.0	11.6
Ocean Pool Bridge									
RFD_027	20.67	12.3	20.72	12.6	20.77	12.8	20.69	12.0	11.6
RFD_028	20.69	11.8	20.75	11.8	20.79	11.8	20.72	11.6	11.4
RFD_029	20.70	17.1	20.75	17.0	20.79	17.0	20.72	16.8	16.5
RFD_030	20.72	15.3	20.77	15.4	20.81	15.5	20.74	14.8	14.3
RFD_031	20.74	18.9	20.79	19.0	20.82	19.1	20.76	18.2	17.6
Junction with RFJ_001									
RFD_032	20.74	14.8	20.79	15.0	20.82	15.1	20.76	14.4	14.0
RFD_033	20.81	15.1	20.85	15.7	20.87	16.0	20.82	14.8	14.3
Junction with RFK_001									
RFD_034	20.81	4.4	20.85	4.5	20.87	4.6	20.82	4.3	4.1
Bridgend Mill Side Sluices									
RFD_035	21.58	4.4	21.60	4.5	21.61	4.6	21.61	4.3	4.1
Junction with RFJ_003									
RFD_036	21.58	8.5	21.60	8.7	21.61	8.8	21.61	8.1	7.8
RFD_037	21.60	8.5	21.62	8.7	21.63	8.8	21.63	8.1	7.8
Bridgend Mill Bridge									
RFD_038	22.23	8.5	22.27	8.7	22.30	8.8	22.26	8.1	7.8
RFD_039	22.24	7.6	22.29	7.8	22.31	7.9	22.27	7.5	7.4
Junction with RFK_004									
RFD_040	22.24	11.5	22.29	11.9	22.31	12.1	22.27	11.1	10.6
RFD_041	22.25	12.8	22.30	13.3	22.32	13.5	22.28	12.4	12.0
RFD_042	22.27	13.0	22.31	13.4	22.34	13.6	22.29	12.6	12.1
RFD_043	22.32	11.5	22.36	11.3	22.39	11.3	22.34	10.9	10.3

Bridgend Kennels Bridge											
RFD_044	22.50	11.5	22.53	11.4	22.55	11.3	22.51	10.9	22.51	10.3	
RFD_045	22.51	11.4	22.54	11.4	22.57	11.4	22.52	10.9	22.52	10.1	
RFD_046	22.53	11.4	22.56	11.4	22.58	11.4	22.54	10.9	22.54	10.1	
Junction with RFL_001											
RFD_047	22.53	6.5	22.56	6.5	22.58	6.5	22.54	5.9	22.54	5.3	
Bridgend Kennels Sluices											
RFD_048	22.88	6.5	22.89	6.5	22.90	6.5	22.88	5.9	22.89	5.3	
RFD_049	22.93	7.0	22.93	7.1	22.94	7.1	22.92	6.4	22.92	5.7	
RFD_050	22.99	7.0	23.00	7.0	23.00	7.0	22.98	6.4	22.96	5.7	
Downton Road Footbridge											
RFD_051	23.01	7.0	23.02	7.0	23.02	7.0	23.00	6.4	22.98	5.7	
RFD_052	23.12	6.9	23.12	7.0	23.12	7.0	23.09	6.3	23.06	5.7	
Upper Mills Footbridge											
RFD_053	23.26	6.9	23.27	6.9	23.27	7.0	23.20	6.3	23.13	5.6	
RFD_054	24.07	6.9	24.07	6.9	24.07	6.9	24.02	6.3	23.97	5.6	
Upper Mills Sluices											
RFD_055	25.11	6.9	25.11	6.9	25.11	6.9	25.13	6.3	25.14	5.6	
RFD_056	25.14	7.2	25.15	7.2	25.15	7.2	25.16	6.7	25.16	6.1	
RFD_057	25.16	9.6	25.16	9.6	25.17	9.7	25.17	9.2	25.17	8.7	
RFD_058	25.25	9.6	25.25	9.6	25.25	9.6	25.25	9.1	25.24	8.7	
RFD_059	25.28	9.5	25.29	9.6	25.29	9.6	25.28	9.1	25.27	8.7	
RFD_060	25.31	9.5	25.31	9.6	25.32	9.6	25.30	9.1	25.30	8.7	
Upper Mills Bridge											
RFD_061	25.36	9.5	25.37	9.6	25.37	9.6	25.35	9.1	25.34	8.6	
RFD_062	25.40	9.5	25.41	9.6	25.41	9.6	25.39	9.1	25.38	8.6	

RFD_063	25.44	9.5	25.45	9.6	25.45	9.6	25.43	9.1	25.41	8.6
RFD_064	25.50	9.5	25.51	9.6	25.51	9.6	25.49	9.1	25.47	8.6
RFD_065	25.54	11.5	25.55	11.6	25.55	11.7	25.53	10.7	25.51	9.8
RFD_066	25.58	13.5	25.59	13.6	25.59	13.8	25.57	12.3	25.55	10.9
Junction with RFL_016										
RFD_067	25.58	17.4	25.59	17.5	25.59	17.6	25.57	16.1	25.55	14.7
RyeFord Saw Mills Culvert										
RFD_068	27.65	17.4	27.73	17.5	27.75	17.5	27.71	16.1	27.75	14.6
RFD_069	27.72	17.0	27.73	17.1	27.75	17.1	27.75	15.8	27.78	14.8
RFD_070	27.84	19.1	27.84	19.3	27.85	19.5	27.85	18.6	27.86	18.1
RFD_071	27.88	19.2	27.89	19.4	27.89	19.7	27.89	18.7	27.89	18.3
RFD_072	27.97	21.0	27.98	21.5	27.99	22.1	27.98	20.6	27.98	20.2
RFD_073	28.06	21.0	28.08	21.4	28.08	22.0	28.06	20.6	28.06	20.1
RFD_074	28.14	21.0	28.16	21.4	28.17	22.0	28.14	20.5	28.13	20.1
RFD_075	28.20	20.9	28.21	21.4	28.23	22.0	28.19	20.5	28.19	20.1
RFD_076	28.39	18.6	28.41	19.0	28.43	19.6	28.38	17.8	28.37	17.0
RFD_077	28.46	20.5	28.48	21.1	28.50	22.0	28.45	19.2	28.44	18.0
RFD_078	28.57	20.4	28.59	21.2	28.61	22.3	28.55	19.2	28.53	18.0
Refuse Tip Weir 2										
RFD_079	29.12	20.4	29.16	21.2	29.21	22.3	29.17	19.2	29.22	18.0
RFD_080	29.11	21.1	29.14	22.4	29.18	23.7	29.14	20.7	29.19	20.3
Refuse Tip Weir 3										
RFD_081	29.45	21.1	29.50	22.4	29.56	23.7	29.53	20.7	29.62	20.3
RFE_001	15.00	2.5	15.13	2.5	15.19	2.5	15.01	2.5	15.01	2.6
RFE_002	15.07	1.1	15.18	1.1	15.24	1.1	15.08	1.1	15.09	0.9
RFE_003	15.08	0.7	15.19	0.7	15.24	0.7	15.09	0.6	15.09	0.5

RFE_004	15.09	0.6	15.19	0.6	15.25	0.6	15.09	0.6	15.10	0.5
Market Garden Weir										
RFE_005	16.00	0.6	16.00	0.6	16.00	0.6	16.00	0.5	15.99	0.5
RFF_001	18.54	0.6	18.55	0.7	18.56	0.8	18.54	0.6	18.53	0.6
RFF_002	18.54	0.6	18.55	0.7	18.56	0.8	18.54	0.6	18.53	0.6
Beards Mill Culvert										
RFF_003	20.44	0.6	20.49	0.7	20.52	0.8	20.49	0.6	20.52	0.6
RFG_001	16.76	2.2	16.76	2.2	16.76	2.2	16.73	2.1	16.69	1.9
RFG_002	16.82	2.2	16.82	2.2	16.82	2.2	16.79	2.1	16.75	1.9
RFG_003	16.92	2.2	16.92	2.2	16.92	2.2	16.89	2.1	16.86	1.9
RFG_004	17.10	2.2	17.10	2.2	17.10	2.2	17.08	2.1	17.05	1.9
RFG_005	17.23	2.2	17.23	2.2	17.23	2.2	17.21	2.1	17.19	1.9
Bonds Mill Side Sluces										
RFG_006	19.22	2.2	19.22	2.2	19.23	2.2	19.26	2.1	19.30	1.9
RFH_001	29.80	15.9	29.85	16.7	29.91	17.3	29.81	15.5	29.85	15.0
RFH_002	29.86	16.4	29.92	16.9	29.97	17.1	29.87	15.8	29.90	14.7
RFH_003	29.95	16.6	30.00	16.9	30.04	17.1	29.95	15.8	29.97	14.7
Ebley Corn Mill Culverts										
RFH_004	30.32	16.6	30.35	16.9	30.38	17.1	30.35	15.8	30.39	14.7
RFJ_001	20.74	4.0	20.79	4.1	20.82	4.2	20.76	3.8	20.76	3.7
RFJ_002	20.76	4.0	20.80	4.1	20.84	4.2	20.77	3.8	20.78	3.7
Bridgend Mill Culvert										
RFJ_003	21.58	4.0	21.60	4.1	21.61	4.2	21.61	3.8	21.66	3.7
RFK_001	20.81	10.6	20.85	11.2	20.87	11.4	20.82	10.5	20.82	10.2
RFK_002	21.12	3.9	21.15	4.1	21.17	4.2	21.12	3.6	21.11	3.2
RFK_003	21.15	3.9	21.18	4.1	21.19	4.2	21.14	3.6	21.13	3.2

Bridgland Mill Bypass Culvert											
RFL_004	22.24	3.9	22.29	4.1	22.31	4.2	22.27	3.6	22.29	3.2	
RFL_001	22.53	5.0	22.56	4.9	22.58	4.9	22.54	5.0	22.54	4.8	
RFL_002	22.61	6.8	22.64	7.3	22.67	7.7	22.62	7.0	22.62	7.1	
RFL_003	22.83	7.1	22.86	7.6	22.89	7.9	22.84	7.3	22.84	7.3	
RFL_004	23.09	3.5	23.12	3.6	23.14	3.6	23.10	3.5	23.11	3.5	
RFL_005	23.34	6.0	23.36	6.8	23.37	7.4	23.34	6.2	23.34	6.4	
RFL_006	23.57	3.9	23.59	3.9	23.60	3.9	23.58	3.8	23.58	3.9	
RFL_007	23.89	12.1	23.91	12.3	23.91	12.4	23.90	12.1	23.90	12.0	
RFL_008	24.22	2.6	24.23	2.6	24.24	2.6	24.22	2.6	24.23	2.6	
RFL_009	24.38	4.7	24.39	4.8	24.40	4.8	24.38	4.6	24.38	4.5	
RFL_010	24.52	4.5	24.53	4.6	24.54	4.7	24.52	4.2	24.52	3.8	
Banty Ditch Culvert											
RFL_011	25.37	4.7	25.38	4.8	25.38	4.8	25.32	4.3	25.23	4.0	
RFL_012	25.38	4.6	25.39	4.7	25.39	4.6	25.32	4.4	25.24	4.2	
RFL_013	25.38	4.8	25.39	4.8	25.40	4.8	25.33	4.4	25.25	4.0	
RFL_014	25.40	4.8	25.41	4.8	25.42	4.8	25.35	4.4	25.28	4.0	
Banty Ditch Weir											
RFL_015	25.58	4.8	25.58	4.8	25.58	4.8	25.56	4.4	25.54	4.0	
RFL_016	25.58	4.8	25.59	4.8	25.59	4.8	25.57	4.5	25.55	4.0	
RFM_001	23.45	0.1	23.47	0.1	23.47	0.1	23.44	0.0	23.42	0.0	
RFM_002	23.45	0.0	23.47	0.0	23.47	0.0	23.44	0.0	23.42	0.0	
RFM_003	23.45	0.0	23.47	0.0	23.47	0.0	23.44	0.0	23.42	0.0	
RFN_001	35.15	2.2	35.20	2.2	35.23	2.2	35.16	2.0	35.18	1.8	
RFN_002	35.16	2.1	35.21	2.2	35.24	2.2	35.17	1.9	35.18	1.7	
RFN_003	35.18	2.1	35.22	2.2	35.25	2.2	35.19	1.9	35.20	1.7	

RFX_004	35.19	2.1	35.24	2.2	35.26	2.2	35.20	1.9	35.21	1.7
Fromehall Mill Sluice										
RFX_005	36.83	2.1	36.86	2.2	36.88	2.2	36.85	1.9	36.87	1.7
RFX_006	36.83	2.1	36.86	2.2	36.88	2.2	36.85	1.9	36.87	1.7
RFX_001	32.69	14.3	32.71	15.0	32.72	15.8	32.69	14.3	32.69	14.3
RFX_002	32.71	14.3	32.72	15.0	32.74	15.8	32.71	14.3	32.71	14.3
RFX_003	32.75	14.3	32.77	15.0	32.79	15.8	32.75	14.3	32.76	14.3
Junction with NSA_001										
RFX_004	32.75	0.2	32.77	0.3	32.79	0.3	32.75	0.2	32.76	0.2
RFX_005	32.75	0.1	32.77	0.2	32.79	0.2	32.75	0.1	32.76	0.1
RFX_006	32.75	0.1	32.77	0.1	32.79	0.1	32.75	0.1	32.76	0.1
RFX_007	32.75	0.0	32.77	0.0	32.79	0.0	32.75	0.0	32.76	0.0
NSA_001	32.75	14.3	32.77	15.0	32.79	15.8	32.75	14.3	32.76	14.3
NSA_002	34.71	14.3	34.76	15.0	34.81	15.8	34.81	14.3	34.93	14.3
SCA_001	32.40	13.9	32.43	15.4	32.44	16.9	32.42	13.9	32.43	13.9
SCA_002	32.37	13.9	32.38	15.4	32.39	16.9	32.38	13.9	32.39	13.9
SCA_003	32.55	13.9	32.59	15.3	32.63	16.7	32.55	13.9	32.57	13.9
SCA_004	32.91	13.9	32.99	15.3	33.07	16.7	32.92	13.9	32.92	13.9
Dudbridge Lock Weir										
SCA_005	35.00	13.9	35.08	15.3	35.17	16.7	35.09	13.9	35.20	13.9
SCA_006	36.49	12.3	36.54	13.5	36.59	14.7	36.50	12.3	36.50	12.3
Ruscombe Brook Weir										
SCA_007	37.56	12.3	37.63	13.5	37.71	14.7	37.64	12.3	37.74	12.3
SCA_008	37.83	12.3	37.90	13.5	37.98	14.7	37.86	12.3	37.92	12.3
SCA_009	37.97	12.3	38.05	13.5	38.12	14.7	38.00	12.3	38.04	12.3
SCA_010	38.05	12.3	38.14	13.5	38.22	14.7	38.08	12.3	38.11	12.3

SCA_011	38.19	12.3	38.28	13.5	38.36	14.8	38.21	12.3	38.24	12.3
SCA_012	38.34	5.5	38.44	6.0	38.53	6.6	38.36	5.5	38.38	5.5
Painswick Stream Weir										
SCA_013	38.41	5.5	38.50	6.1	38.60	6.6	38.43	5.5	38.47	5.5
SCA_014	38.42	5.6	38.52	6.2	38.61	6.8	38.44	5.6	38.48	5.6
Calnecross Road Weir										
SCA_015	40.23	5.7	40.28	6.2	40.33	6.8	40.29	5.7	40.35	5.7
SCA_016	40.43	5.7	40.48	6.2	40.53	6.8	40.46	5.7	40.50	5.7

Model Cell	100 Year Event (original)		100 Year Event + 10% flow		100 Year Event + 20% flow		100 Year Event - 10% coeffs		100 Year Event - 20% coeffs	
	Level (mOD)	Depth (m)	Level (mOD)	Depth (m)	Level (mOD)	Depth (m)	Level (mOD)	Depth (m)	Level (mOD)	Depth (m)
Cell 1	8.20	0.00	8.20	0.00	8.20	0.00	8.20	0.00	8.20	0.00
Cell 2	8.10	0.00	8.10	0.00	8.10	0.00	8.10	0.00	8.10	0.00
Cell 3	8.51	0.81	8.67	0.97	8.96	1.26	8.49	0.79	8.54	0.84
Cell 4	8.51	0.41	8.67	0.57	8.97	0.87	8.49	0.39	8.54	0.44
Cell 5	8.40	0.00	8.64	0.24	8.98	0.58	8.40	0.00	8.40	0.00
Cell 6	8.20	0.00	8.20	0.00	8.20	0.00	8.20	0.00	8.20	0.00
Cell 7	8.40	0.00	8.40	0.00	8.40	0.00	8.40	0.00	8.40	0.00
Cell 8	8.80	0.00	8.80	0.00	8.80	0.00	8.80	0.00	8.80	0.00
Cell 9	8.37	0.00	8.37	0.00	8.37	0.00	8.37	0.00	8.37	0.00
Cell 10	8.38	0.09	8.38	0.09	8.38	0.09	8.38	0.09	8.38	0.09
Cell 11	10.39	1.39	10.73	1.73	10.87	1.87	10.62	1.62	10.72	1.72
Cell 12	10.39	1.39	10.73	1.73	10.87	1.87	10.62	1.62	10.72	1.72
Cell 13	10.39	1.39	10.73	1.73	10.87	1.87	10.62	1.62	10.72	1.72
Cell 14	10.39	1.49	10.73	1.83	10.87	1.97	10.62	1.73	10.72	1.82
Cell 15	10.39	1.09	10.73	1.43	10.88	1.58	10.63	1.33	10.72	1.42
Cell 16	10.47	0.97	10.74	1.24	10.88	1.38	10.63	1.13	10.72	1.22
Cell 17	10.47	1.07	10.74	1.34	10.88	1.48	10.63	1.23	10.73	1.33
Cell 18	10.47	1.07	10.74	1.34	10.89	1.49	10.63	1.23	10.73	1.33
Cell 19	10.60	0.00	10.60	0.00	10.60	0.00	10.60	0.00	10.60	0.00
Cell 20	12.65	1.15	12.67	1.17	12.68	1.18	12.65	1.15	12.65	1.15
Cell 21	11.32	0.92	11.55	1.15	11.75	1.35	11.46	1.06	11.59	1.19
Cell 21A	11.36	0.36	11.56	0.56	11.75	0.75	11.47	0.47	11.59	0.59
Cell 22	12.65	1.15	12.67	1.17	12.68	1.18	12.65	1.15	12.65	1.15
Cell 23	11.32	0.92	11.55	1.15	11.75	1.35	11.46	1.06	11.59	1.19

Cell 24	12.65	1.65	12.67	1.67	12.69	1.69	12.65	1.65	12.65	1.65
Cell 25	11.64	0.74	11.66	0.76	11.76	0.85	11.65	0.75	11.66	0.76
Cell 26	12.65	1.65	12.67	1.67	12.69	1.69	12.65	1.65	12.65	1.65
Cell 27	11.50	0.00	11.50	0.00	11.73	0.23	11.50	0.00	11.50	0.00
Cell 28	12.65	1.15	12.67	1.17	12.69	1.19	12.65	1.15	12.65	1.16
Cell 29	12.00	0.00	12.00	0.00	12.09	0.09	12.00	0.00	12.00	0.00
Cell 30	13.53	2.03	13.55	2.05	13.57	2.07	13.53	2.03	13.55	2.05
Cell 31	12.50	0.00	12.50	0.00	12.65	0.15	12.50	0.00	12.50	0.00
Cell 32	13.53	1.53	13.56	1.56	13.57	1.57	13.53	1.53	13.55	1.55
Cell 33	13.20	0.00	13.20	0.00	13.20	0.00	13.20	0.00	13.20	0.00
Cell 34	13.54	1.04	13.56	1.06	13.58	1.08	13.54	1.03	13.56	1.06
Cell 35	14.40	0.90	14.41	0.91	14.42	0.92	14.38	0.89	14.41	0.91
Cell 36	13.55	1.05	13.57	1.07	13.59	1.09	13.54	1.04	13.57	1.07
Cell 37	14.47	0.97	14.50	1.00	14.51	1.01	14.47	0.97	14.48	0.98
Cell 38	13.70	0.20	13.82	0.32	13.84	0.34	13.56	0.06	13.82	0.32
Cell 39	14.30	0.00	14.30	0.00	14.30	0.00	14.30	0.00	14.30	0.00
Cell 40	14.25	0.00	14.27	0.01	14.49	0.24	14.25	0.00	14.25	0.00
Cell 41	15.02	0.52	15.09	0.59	15.13	0.63	15.02	0.52	15.02	0.52
Cell 42	15.05	1.15	15.11	1.21	15.15	1.25	15.06	1.16	15.05	1.16
Cell 43	15.09	0.69	15.15	0.75	15.19	0.79	15.10	0.70	15.10	0.69
Cell 44	15.22	0.72	15.26	0.76	15.28	0.78	15.22	0.72	15.22	0.72
Cell 45	15.76	1.36	15.77	1.37	15.78	1.38	15.77	1.36	15.76	1.36
Cell 46	15.90	1.50	15.92	1.52	15.93	1.53	15.90	1.50	15.90	1.50
Cell 47	16.27	0.52	16.28	0.53	16.28	0.53	16.27	0.52	16.27	0.52
Cell 48	16.45	0.45	16.47	0.47	16.48	0.48	16.46	0.46	16.46	0.46
Cell 49	17.01	0.26	17.02	0.27	17.02	0.27	17.01	0.26	17.01	0.26

Cell 50	17.30	0.30	17.31	0.31	17.32	0.32	17.30	0.30	17.30	0.30
Cell 51	17.78	0.33	17.79	0.34	17.80	0.35	17.78	0.33	17.78	0.33
Cell 52	18.47	0.57	18.48	0.58	18.48	0.58	18.47	0.57	18.47	0.57
Cell 53	17.45	0.25	17.47	0.27	17.48	0.28	17.46	0.26	17.46	0.26
Cell 54	17.68	0.68	17.69	0.69	17.70	0.70	17.68	0.69	17.69	0.69
Cell 55	17.86	0.11	17.88	0.13	17.89	0.14	17.87	0.12	17.88	0.12
Cell 56	18.36	0.10	18.37	0.12	18.38	0.13	18.36	0.11	18.37	0.12
Cell 57	19.80	0.80	19.80	0.80	19.81	0.81	19.80	0.80	19.80	0.81
Cell 58	20.68	1.68	20.73	1.73	20.77	1.77	20.70	1.70	20.71	1.71
Cell 59	20.69	1.69	20.74	1.74	20.79	1.78	20.71	1.71	20.72	1.72
Cell 60	20.70	1.29	20.75	1.35	20.79	1.39	20.72	1.32	20.73	1.33
Cell 61	20.72	0.22	20.78	0.28	20.82	0.32	20.74	0.24	20.75	0.25
Cell 62	21.29	0.48	21.30	0.50	21.31	0.51	21.29	0.49	21.29	0.49
Cell 63	21.66	0.46	21.67	0.47	21.68	0.48	21.66	0.46	21.66	0.46
Cell 64	20.70	0.90	20.76	0.96	20.80	1.00	20.73	0.93	20.73	0.94
Cell 65	20.73	0.73	20.78	0.78	20.82	0.82	20.75	0.75	20.76	0.76
Cell 66	21.64	1.25	21.65	1.25	21.66	1.26	21.65	1.25	21.65	1.25
Cell 67	22.25	0.75	22.29	0.79	22.32	0.82	22.27	0.77	22.29	0.79
Cell 68	22.27	0.72	22.31	0.76	22.34	0.79	22.29	0.74	22.31	0.76
Cell 69	22.52	0.72	22.55	0.75	22.57	0.77	22.53	0.73	22.53	0.73
Cell 70	22.56	0.66	22.59	0.69	22.61	0.71	22.57	0.67	22.57	0.67
Cell 71	22.60	0.60	22.64	0.64	22.66	0.66	22.61	0.61	22.61	0.61
Cell 72	23.33	0.33	23.34	0.34	23.35	0.35	23.34	0.34	23.34	0.34
Cell 73	23.70	0.50	23.74	0.54	23.77	0.57	23.72	0.52	23.73	0.53
Cell 74	22.85	0.85	22.86	0.85	22.86	0.86	22.85	0.85	22.84	0.84
Cell 75	23.15	0.65	23.18	0.68	23.19	0.69	23.16	0.66	23.16	0.66

Cell 76	23.32	0.32	23.35	0.35	23.36	0.36	23.33	0.33	23.33	0.33
Cell 77	23.54	0.43	23.56	0.46	23.57	0.47	23.54	0.44	23.54	0.44
Cell 78	24.23	0.33	24.24	0.34	24.24	0.34	24.23	0.33	24.23	0.33
Cell 79	24.35	0.55	24.37	0.57	24.39	0.59	24.36	0.56	24.37	0.57
Cell 80	24.57	0.32	24.59	0.34	24.60	0.35	24.58	0.33	24.59	0.34
Cell 81	24.99	0.59	25.01	0.61	25.02	0.62	25.00	0.60	25.01	0.61
Cell 82	24.57	0.97	24.59	0.99	24.60	1.00	24.58	0.98	24.59	0.99
Cell 83	25.38	1.38	25.39	1.39	25.39	1.39	25.32	1.32	25.23	1.23
Cell 84	25.40	1.30	25.41	1.31	25.41	1.31	25.34	1.24	25.25	1.15
Cell 85	27.84	0.94	27.85	0.95	27.86	0.96	27.85	0.95	27.86	0.96
Cell 86	27.10	0.00	27.10	0.00	27.10	0.00	27.10	0.00	27.27	0.17
Cell 87	26.40	0.00	26.40	0.00	26.40	0.00	26.40	0.00	26.40	0.00
Cell 88	26.39	0.99	26.64	1.24	26.81	1.41	26.67	1.27	26.96	1.56
Cell 88A	26.61	1.21	26.75	1.35	26.89	1.49	26.76	1.36	26.99	1.59
Cell 89	26.63	0.38	26.76	0.51	26.89	0.64	26.77	0.52	27.00	0.75
Cell 89A	26.63	0.38	26.76	0.51	26.89	0.64	26.77	0.52	27.00	0.75
Cell 90	27.67	0.92	27.71	0.96	27.73	0.98	27.68	0.94	27.70	0.95
Cell 90A	27.66	0.91	27.70	0.94	27.72	0.97	27.68	0.93	27.69	0.94
Cell 91A	27.50	0.00	27.50	0.00	27.82	0.32	27.50	0.00	27.50	0.00
Cell 92	28.42	0.52	28.44	0.54	28.45	0.55	28.42	0.52	28.43	0.53
Cell 93	29.86	0.61	29.92	0.67	29.97	0.72	29.87	0.62	29.90	0.65
Cell 93A	28.39	0.99	28.39	0.99	28.40	1.00	28.39	0.99	28.40	1.00
Cell 94	30.68	0.68	30.71	0.71	30.75	0.75	30.69	0.69	30.71	0.71
Cell 94A	28.38	1.13	28.39	1.14	28.40	1.15	28.39	1.14	28.40	1.15
Cell 95	30.78	1.48	30.77	1.48	30.81	1.51	30.78	1.48	30.76	1.46
Cell 95A	28.30	0.30	28.31	0.31	28.32	0.32	28.32	0.32	28.33	0.33

Cell 96	30.26	0.76	30.28	0.78	30.32	0.82	30.27	0.77	30.29	0.79
Cell 97	30.27	0.52	30.29	0.54	30.33	0.58	30.28	0.53	30.30	0.55
Cell 98	31.96	1.06	32.02	1.12	32.06	1.16	31.98	1.08	32.02	1.12
Cell 99	32.21	0.71	32.22	0.72	32.24	0.74	32.21	0.71	32.22	0.72
Cell 100	32.23	0.23	32.25	0.25	32.27	0.27	32.24	0.24	32.25	0.25
Cell 101	32.60	0.60	32.61	0.61	32.64	0.64	32.60	0.60	32.60	0.60
Cell 102	36.81	0.41	36.83	0.43	36.85	0.45	36.83	0.43	36.84	0.45
Cell 103	36.81	0.81	36.84	0.84	36.85	0.85	36.83	0.83	36.85	0.85
Cell 104	38.96	0.61	39.05	0.70	39.11	0.76	38.95	0.60	38.92	0.57

Section Label	100 Year Event (original)		100 Year Event + 10% flow		100 Year Event + 20% flow		100 Year Event - 10% coeffs		100 Year Event - 20% coeffs	
	Level (mOD)	Flow (m³/s)	Level (mOD)	Flow (m³/s)	Level (mOD)	Flow (m³/s)	Level (mOD)	Flow (m³/s)	Level (mOD)	Flow (m³/s)
RFA_175	39.41	10.7	39.43	11.2	39.46	11.7	39.39	10.3	39.36	9.7
RFA_176	39.74	10.6	39.77	11.2	39.79	11.7	39.72	10.2	39.69	9.7
RFA_177	39.99	10.6	40.02	11.2	40.04	11.7	39.97	10.2	39.94	9.6
RFA_178	40.18	10.6	40.21	11.2	40.23	11.7	40.16	10.2	40.13	9.6
RFA_179	40.39	10.6	40.41	11.1	40.44	11.6	40.37	10.2	40.34	9.6
RFA_180	40.98	10.5	41.01	11.1	41.04	11.6	40.95	10.1	40.92	9.6
Railway Mill Weir										
RFA_181	41.81	10.5	41.84	11.1	41.86	11.6	41.84	10.1	41.88	9.6
RFA_182	41.90	10.5	41.93	11.1	41.96	11.6	41.92	10.1	41.94	9.6
RFA_183	41.96	10.5	41.99	11.1	42.01	11.6	41.97	10.1	41.98	9.6
Thames & Severn Canal Syphon										
RFA_184	43.64	10.5	43.86	11.1	44.07	11.6	43.89	10.1	44.17	9.6
RFA_185	43.64	10.1	43.87	10.2	44.08	10.2	43.90	9.4	44.17	8.6
RFA_186	43.65	10.1	43.87	10.2	44.08	10.2	43.91	9.4	44.18	8.7
Arundell Mill Sluices										
RFA_187	43.95	10.1	44.06	10.2	44.20	10.2	44.09	9.4	44.29	8.7
RFA_188	44.01	10.1	44.10	10.2	44.23	10.3	44.12	9.5	44.30	8.8
RFA_189	44.03	10.1	44.11	10.2	44.23	10.3	44.13	9.5	44.30	8.8
Eagle Mills Culvert										
RFA_190	44.64	10.1	44.79	10.2	44.96	10.2	44.78	9.5	44.94	8.8
RFA_191	44.79	10.1	44.90	10.2	45.03	10.2	44.87	9.4	44.98	8.8
RFA_192	44.79	10.4	44.86	11.0	44.95	11.6	44.84	10.1	44.92	9.7
Butterow Hill Bridge										
RFA_193	45.58	10.4	45.80	11.0	46.02	11.6	45.68	10.1	45.80	9.7

RFA_194	45.58	10.4	45.80	11.0	46.01	11.6	45.68	10.1	45.80	9.7
Bowbridge Estate Bridge										
RFA_195	45.61	10.3	45.83	11.0	46.04	11.6	45.71	10.0	45.82	9.7
RFA_196	45.59	10.3	45.82	11.0	46.04	11.6	45.69	10.0	45.81	9.7
RFA_197	45.73	10.3	45.92	10.9	46.11	11.5	45.80	10.0	45.89	9.7
RFA_198	45.80	10.3	45.97	10.9	46.15	11.5	45.86	10.0	45.94	9.7
Bowbridge Estate Bridge 2										
RFA_199	45.83	10.3	46.01	10.9	46.27	11.5	45.89	10.0	45.97	9.7
RFA_200	45.85	10.3	46.03	10.9	46.28	11.5	45.91	10.0	45.99	9.6
RFA_201	45.92	10.3	46.08	10.9	46.32	11.5	45.97	10.0	46.03	9.6
RFA_202	45.98	10.3	46.13	10.9	46.35	11.5	46.01	10.0	46.07	9.6
RFA_203	45.99	10.3	46.13	10.9	46.35	11.5	46.02	10.0	46.08	9.7
Butterow Footpath Bridge										
RFA_204	46.25	10.3	46.33	10.9	46.47	11.5	46.28	10.0	46.32	9.7
RFA_205	46.28	10.2	46.36	10.9	46.48	11.5	46.31	10.0	46.34	9.7
RFA_206	46.28	10.2	46.36	10.9	46.48	11.5	46.31	10.0	46.34	9.7
RFA_207	46.42	10.2	46.47	10.9	46.56	11.5	46.43	9.9	46.44	9.6
Thrupp Works Weir										
RFA_208	47.20	10.2	47.25	10.9	47.29	11.5	47.25	9.9	47.30	9.6
RFA_209	47.20	10.2	47.24	10.9	47.28	11.5	47.24	9.9	47.29	9.6
Junction with RFO_001										
RFA_210	47.20	4.7	47.24	5.0	47.28	5.3	47.24	4.6	47.29	4.5
RFA_211	47.21	4.6	47.26	4.8	47.30	5.1	47.26	4.4	47.31	4.4
RFA_212	47.25	5.1	47.29	5.5	47.33	5.8	47.29	5.1	47.33	5.4
RFA_213	47.29	5.1	47.33	5.4	47.37	5.7	47.32	5.1	47.36	5.4
RFA_214	47.37	5.1	47.41	5.4	47.45	5.7	47.39	5.0	47.43	5.4

Griffin Mill Footbridge 1										
RFA_215	48.33	5.1	48.40	5.4	48.47	5.7	48.36	5.0	48.53	5.3
RFA_216	48.34	5.1	48.41	5.4	48.48	5.7	48.38	5.0	48.54	5.3
RFA_217	48.36	5.1	48.43	5.4	48.49	5.7	48.39	5.0	48.55	5.3
Griffin Mill Bypass										
RFA_218	48.60	5.0	48.63	5.3	48.67	5.7	48.63	5.0	48.72	5.3
Junction with RFO_012										
RFA_219	48.60	10.0	48.63	10.7	48.67	11.4	48.63	9.8	48.72	9.5
Griffin Mill Access Bridge										
RFA_220	48.65	10.0	48.68	10.7	48.72	11.4	48.67	9.8	48.75	9.5
RFA_221	48.79	10.0	48.82	10.6	48.86	11.3	48.80	9.7	48.84	9.4
Griffin Mill Footbridge 2										
RFA_222	48.80	10.0	48.84	10.6	48.87	11.3	48.81	9.7	48.85	9.4
Junction with RFP_001										
RFA_223	48.80	7.8	48.84	8.3	48.87	8.8	48.81	7.7	48.85	7.6
RFA_224	48.90	7.8	48.94	8.3	48.97	8.8	48.90	7.7	48.93	7.6
Brookside Bridge 1										
RFA_225	49.12	7.8	49.17	8.3	49.23	8.8	49.13	7.7	49.15	7.5
RFA_226	49.18	7.8	49.23	8.3	49.29	8.8	49.18	7.7	49.20	7.5
Ham Lock Footbridge										
RFA_227	49.38	7.8	49.46	8.3	49.54	8.8	49.40	7.7	49.43	7.5
RFA_228	49.41	7.8	49.48	8.3	49.55	8.8	49.42	7.7	49.45	7.5
Swimming Pool Bridge										
RFA_229	49.81	7.8	49.96	8.2	50.15	8.7	49.85	7.7	49.90	7.5
RFA_230	49.95	7.8	50.07	8.0	50.24	8.0	49.98	7.6	50.01	7.3
Phoenix Mill Bypass Sluices										

RFA_231	50.19	7.7	50.27	8.0	50.35	8.0	50.23	7.6	50.27	7.3
Junction with RFP_006										
RFA_232	50.19	9.9	50.27	10.5	50.35	11.2	50.23	9.7	50.27	9.4
RFA_233	50.37	9.9	50.43	10.5	50.48	11.2	50.39	9.6	50.40	9.3
Phoenix Estate Access Bridges										
RFA_234	50.56	9.9	50.59	10.5	50.64	11.2	50.53	9.6	50.54	9.3
RFA_235	50.71	9.9	50.76	10.5	50.83	11.2	50.72	9.6	50.71	9.3
Phoenix Estate Footbridge										
RFA_236	50.81	9.9	50.87	10.5	50.92	11.2	50.82	9.6	50.80	9.3
RFA_237	50.98	9.9	51.03	10.5	51.08	11.1	50.97	9.6	50.95	9.3
Phoenix Estate Sluices										
RFA_238	52.18	9.8	52.21	10.5	52.24	11.1	52.22	9.6	52.26	9.3
RFA_239	52.22	9.8	52.25	10.4	52.28	11.1	52.25	9.6	52.28	9.3
Hawker Sliddeley Bridge										
RFA_240	52.22	9.8	52.25	10.4	52.28	11.1	52.25	9.6	52.28	9.3
RFA_241	52.30	9.8	52.33	10.4	52.36	11.1	52.32	9.5	52.34	9.2
Thrupp Caravan Site Bridge										
RFA_242	52.91	9.8	53.14	10.4	53.41	11.1	53.02	9.5	53.14	9.2
RFA_243	52.95	9.8	53.17	10.4	53.42	11.1	53.05	9.5	53.16	9.2
RFA_244	52.97	9.8	53.18	10.4	53.43	11.1	53.07	9.5	53.17	9.3
RFA_245	53.03	9.8	53.22	10.4	53.45	11.1	53.11	9.5	53.20	9.3
RFA_246	53.19	9.7	53.32	10.4	53.50	11.1	53.23	9.5	53.29	9.2
RFA_247	53.41	9.7	53.49	10.4	53.62	11.1	53.42	9.5	53.43	9.2
RFA_248	53.58	9.7	53.64	10.4	53.73	11.1	53.57	9.5	53.57	9.2
RFA_249	53.77	7.7	53.83	7.9	53.91	8.2	53.76	7.4	53.75	7.1
Brimscombe Mill Pond Outlet										

RFA_250	55.58	7.7	55.61	7.9	55.63	8.1	55.64	7.4	55.70	7.0
RFA_251	55.59	7.6	55.61	7.9	55.64	8.1	55.64	7.3	55.70	7.0
RFA_252	55.60	7.6	55.62	7.8	55.65	8.1	55.65	7.3	55.71	7.0
Brimscombe Mill Chemical Works Culvert										
RFA_253	56.34	7.6	56.39	7.8	56.44	8.1	56.35	7.3	56.36	7.0
RFA_254	56.38	9.6	56.43	10.2	56.47	10.9	56.39	9.4	56.40	9.1
Brimscombe Hill Bridge										
RFA_255	56.39	9.6	56.43	10.2	56.48	10.9	56.40	9.3	56.40	9.1
RFA_256	56.37	9.6	56.41	10.2	56.46	10.9	56.38	9.3	56.39	9.1
Burket Bridge (Port Industrial Estate)										
RFA_257	56.35	9.6	56.38	10.2	56.42	10.9	56.36	9.3	56.37	9.1
RFA_258	56.41	9.5	56.45	10.2	56.50	10.9	56.42	9.3	56.42	9.1
Bensons Culvert										
RFA_259	56.96	9.5	57.03	10.1	57.11	10.9	56.97	9.3	56.97	9.0
RFA_260	57.03	9.5	57.10	10.1	57.18	10.9	57.03	9.3	57.03	9.0
Bensons Bridge										
RFA_261	57.12	9.5	57.20	10.1	57.30	10.9	57.12	9.3	57.12	9.0
RFA_262	57.14	9.5	57.22	10.1	57.32	10.8	57.15	9.2	57.14	9.0
Port Industrial Estate Sluices										
RFA_263	57.29	9.5	57.36	10.1	57.45	10.8	57.31	9.2	57.34	9.0
Port Industrial Estate Bridge										
RFA_264	57.35	9.5	57.43	10.1	57.53	10.8	57.38	9.2	57.40	9.0
RFA_265	57.37	9.4	57.45	10.1	57.55	10.8	57.40	9.2	57.42	8.9
RFA_266	57.42	9.4	57.50	10.0	57.59	10.7	57.44	9.1	57.46	8.9
RFA_267	57.47	9.3	57.54	9.9	57.63	10.7	57.48	9.1	57.50	8.8
RFA_268	57.51	9.3	57.58	9.9	57.66	10.6	57.52	9.1	57.53	8.8

RFA_269	57.49	9.3	57.55	9.9	57.63	10.6	57.50	9.1	57.51	8.8
RFA_270	57.73	9.3	57.78	9.9	57.84	10.6	57.72	9.1	57.71	8.8
RFA_271	57.78	9.3	57.83	9.9	57.89	10.6	57.78	9.0	57.77	8.8
Junction with RFQ_001										
RFA_272	57.78	6.5	57.83	7.0	57.89	7.7	57.78	6.5	57.77	6.5
RFA_273	57.95	6.5	57.98	7.0	58.02	7.6	57.94	6.5	57.94	6.4
RFA_274	58.24	3.5	58.26	3.6	58.28	3.8	58.23	3.2	58.22	2.9
RFA_275	58.29	3.4	58.31	3.6	58.33	3.8	58.28	3.2	58.26	2.9
Bourne Mills Bypass										
RFA_276	58.55	3.4	58.56	3.6	58.58	3.8	58.56	3.2	58.56	2.9
Junction with RFQ_004										
RFA_277	58.55	9.2	58.56	9.8	58.58	10.5	58.56	8.9	58.56	8.7
RFA_278	58.73	9.1	58.75	9.7	58.78	10.5	58.73	8.9	58.72	8.6
RFA_279	58.93	7.6	58.96	8.6	59.00	9.4	58.93	7.5	58.92	7.1
RFA_280	59.07	7.6	59.11	8.6	59.15	9.4	59.06	7.5	59.04	7.1
Wimberley Mills Weir										
RFA_281	60.16	7.6	60.21	8.6	60.25	9.4	60.20	7.5	60.23	7.1
RFA_282	60.19	7.6	60.24	8.5	60.28	9.4	60.22	7.5	60.24	7.1
RFA_283	60.19	7.6	60.24	8.5	60.28	9.4	60.23	7.5	60.25	7.1
Wimberley Mills Bridge										
RFA_284	60.37	7.6	60.44	8.5	60.50	9.4	60.40	7.5	60.40	7.1
RFA_285	60.40	7.6	60.47	8.5	60.52	9.4	60.42	7.5	60.43	7.1
RFA_286	60.49	7.6	60.55	8.5	60.60	9.3	60.50	7.5	60.50	7.1
Wimberley Mills Culvert 1										
RFA_287	60.96	7.6	61.03	8.5	61.09	9.3	60.95	7.5	60.92	7.1
RFA_288	60.97	7.6	61.07	8.1	61.15	8.5	60.97	7.3	60.94	6.9

Wimberley Mills Culvert 2										
RFA_289	62.20	7.6	62.22	8.1	62.23	8.5	62.21	7.3	62.21	6.9
RFA_290	62.22	7.8	62.24	8.6	62.25	9.4	62.23	7.6	62.22	7.1
RFA_291	62.24	7.8	62.26	8.6	62.28	9.4	62.25	7.6	62.24	7.1
RFA_292	62.25	7.8	62.28	8.5	62.30	9.4	62.26	7.6	62.25	7.1
RFA_293	62.28	7.8	62.31	8.5	62.33	9.4	62.28	7.6	62.27	7.1
RFA_294	62.36	7.8	62.40	8.5	62.43	9.4	62.36	7.6	62.34	7.1
RFA_295	62.44	7.8	62.48	8.5	62.51	9.4	62.43	7.6	62.41	7.1
RFA_296	62.53	7.8	62.57	8.5	62.61	9.3	62.52	7.6	62.50	7.1
RFA_297	62.63	7.8	62.68	8.5	62.73	9.3	62.62	7.6	62.59	7.1
RFA_298	62.73	7.8	62.78	8.5	62.83	9.3	62.72	7.6	62.69	7.1
Junction with RFR_001										
RFA_299	62.73	2.6	62.78	2.8	62.83	2.9	62.72	2.5	62.69	2.3
RFA_300	62.93	2.6	62.93	2.8	62.93	2.9	63.04	2.5	63.10	2.3
St Marys Mill Canal Control Weir										
RFA_301	63.21	2.6	63.22	2.8	63.24	2.9	63.22	2.5	63.23	2.3
RFA_301A	63.22	2.7	63.23	2.8	63.25	3.0	63.23	2.5	63.24	2.3
St Marys Mill Bypass Sluices										
RFA_302	64.54	2.7	64.61	2.8	64.69	3.0	64.60	2.5	64.64	2.3
Junction with RFR_002										
RFA_303	64.54	7.9	64.61	8.6	64.69	9.4	64.60	7.6	64.64	7.1
St Marys House Culvert										
RFA_304	64.70	7.8	64.77	8.5	64.85	9.4	64.73	7.6	64.74	7.1
RFA_305	64.82	7.8	64.89	8.5	64.97	9.4	64.83	7.6	64.83	7.1

Iles Mill Railway Culvert										
RFA_306	64.88	7.8	64.95	8.5	65.03	9.4	64.89	7.6	64.88	7.1
RFA_307	64.93	7.8	65.00	8.5	65.09	9.4	64.94	7.6	64.93	7.1
Junction with RFS_001										
RFA_308	64.93	5.6	65.00	6.2	65.09	7.0	64.94	5.6	64.93	5.3
RFA_309	65.08	5.6	65.15	6.2	65.22	6.9	65.09	5.6	65.07	5.3
Iles Mill Bridge										
RFA_310	65.33	5.6	65.50	6.2	65.72	6.9	65.35	5.6	65.31	5.3
RFA_311	65.40	5.6	65.55	6.2	65.76	7.0	65.42	5.6	65.38	5.3
Junction with RFT_001										
RFA_312	65.40	5.6	65.55	6.2	65.76	6.9	65.42	5.6	65.38	5.3
RFA_313	65.55	5.6	65.66	6.2	65.83	6.9	65.55	5.6	65.52	5.3
RFA_314	65.98	2.0	66.01	2.2	66.06	2.3	65.97	1.8	65.95	1.6
RFA_315	66.06	2.0	66.09	2.2	66.13	2.3	66.04	1.8	66.02	1.6
Iles Mill Bypass Upper Weirs										
RFA_316	66.26	2.0	66.28	2.2	66.30	2.3	66.26	1.8	66.25	1.6
Junction with RFS_007										
RFA_317	66.26	7.8	66.28	8.5	66.30	9.4	66.26	7.6	66.25	7.1
RFA_318	66.41	7.8	66.45	8.5	66.49	9.4	66.40	7.6	66.38	7.1
Belvedere Mill Sluices										
RFA_319	68.27	7.8	68.31	8.5	68.36	9.4	68.30	7.6	68.33	7.1
RFA_320	68.27	7.8	68.31	8.5	68.35	9.4	68.30	7.6	68.33	7.1
Belvedere Mill Bridge										
RFA_321	68.28	7.8	68.32	8.5	68.38	9.4	68.32	7.6	68.35	7.1
RFA_322	68.44	7.8	68.49	8.5	68.55	9.4	68.45	7.6	68.46	7.1
RFA_323	68.49	7.8	68.54	8.5	68.62	8.9	68.50	7.6	68.51	6.9

Chalford Industrial Estate Sluices										
RFA_324	70.32	7.8	70.56	8.5	70.69	8.9	70.53	7.6	70.62	6.9
RFA_325	70.35	7.8	70.57	8.6	70.70	9.5	70.55	7.6	70.63	7.4
RFA_326	70.48	7.8	70.65	8.6	70.76	9.5	70.61	7.6	70.68	7.4
Chalford Chalks Culvert										
RFA_327	71.95	7.8	71.96	8.6	71.98	9.5	71.85	7.6	71.71	7.4
RFA_328	71.97	7.8	71.97	8.6	72.01	9.5	71.86	7.6	71.72	7.4
RFA_329	72.00	7.8	72.00	8.6	72.04	9.5	71.91	7.6	71.79	7.4
RFA_330	72.84	7.8	72.90	8.6	72.96	9.5	72.83	7.6	72.82	7.4
Thanet house Bridge										
RFA_331	73.66	7.8	73.73	8.6	73.81	9.5	73.72	7.6	73.78	7.3
RFA_332	73.77	7.8	73.84	8.6	73.91	9.5	73.80	7.6	73.85	7.3
Red Lion Bridge										
RFA_333	75.01	7.8	75.15	8.6	75.30	9.5	75.00	7.6	74.95	7.3
RFA_334	75.05	7.8	75.20	8.6	75.35	9.5	75.04	7.6	75.00	7.3
RFA_335	75.07	7.8	75.21	8.6	75.36	9.5	75.05	7.6	75.01	7.4
Brooklyn Bridge										
RFA_336	75.08	7.8	75.22	8.6	75.37	9.5	75.07	7.6	75.02	7.4
RFA_337	75.08	7.8	75.23	8.6	75.38	9.5	75.07	7.6	75.03	7.4
Sub-station Bridge										
RFA_338	75.09	7.8	75.23	8.6	75.38	9.5	75.08	7.6	75.04	7.4
RFA_339	75.09	7.8	75.24	8.7	75.39	9.6	75.08	7.6	75.04	7.4
RFA_340	75.11	7.8	75.25	8.7	75.40	9.6	75.10	7.6	75.06	7.4
RFA_341	75.11	7.8	75.25	8.7	75.40	9.6	75.10	7.6	75.06	7.4
RFA_342	75.12	7.9	75.26	8.7	75.41	9.6	75.11	7.6	75.06	7.4
RFA_343	75.13	7.9	75.27	8.7	75.41	9.6	75.11	7.7	75.07	7.4

Ridley Mill Weir											
RFA_344	77.49	7.9	77.56	8.7	77.64	9.6	77.55	7.7	77.61	7.4	7.4
RFA_345	77.49	7.9	77.56	8.7	77.64	9.6	77.55	7.7	77.61	7.4	7.4
RFA_346	77.62	7.9	77.68	8.7	77.75	9.6	77.65	7.7	77.69	7.4	7.4
RFA_347	77.95	7.9	78.02	8.7	78.09	9.6	77.95	7.6	77.94	7.4	7.4
Harley Lane Bridge											
RFA_348	79.25	7.9	79.50	8.7	79.75	9.6	79.30	7.6	79.32	7.4	7.4
RFA_349	79.25	6.9	79.50	7.6	79.75	8.6	79.30	6.6	79.32	6.5	6.5
RFA_350	79.26	7.0	79.50	6.9	79.75	7.5	79.30	6.7	79.32	6.7	6.7
RFA_351	79.26	7.0	79.51	7.0	79.75	7.3	79.31	6.7	79.33	6.7	6.7
RFA_352	79.27	4.8	79.52	5.4	79.76	6.4	79.32	4.7	79.34	4.7	4.7
RFA_353	79.27	5.2	79.52	5.8	79.76	6.7	79.32	5.2	79.34	5.1	5.1
RFA_354	79.28	6.2	79.52	7.1	79.76	7.4	79.33	6.2	79.34	6.1	6.1
RFA_355	79.28	8.0	79.53	9.0	79.77	9.6	79.33	7.9	79.35	7.8	7.8
RFA_356	79.31	6.2	79.53	7.2	79.77	8.1	79.35	6.1	79.36	6.0	6.0
Ashmead Mill Sluices											
RFA_357	79.70	6.2	79.81	7.2	80.01	8.1	79.76	6.1	79.83	6.0	6.0
RFA_358	79.73	8.0	79.83	9.1	80.01	10.1	79.78	8.0	79.84	7.8	7.8
RFA_359	79.87	8.0	79.96	9.0	80.10	10.1	79.90	8.0	79.94	7.8	7.8
RFA_360	80.09	8.0	80.16	9.0	80.25	10.1	80.10	7.9	80.11	7.8	7.8
RFA_361	80.32	8.0	80.38	9.0	80.44	10.1	80.32	7.9	80.32	7.8	7.8
RFA_362	80.63	7.9	80.68	9.0	80.73	10.0	80.62	7.9	80.62	7.8	7.8
RFA_363	81.10	7.9	81.17	8.9	81.24	10.0	81.09	7.9	81.08	7.8	7.8
RFA_364	81.30	7.9	81.37	8.9	81.45	10.0	81.29	7.9	81.28	7.7	7.7
RFA_365	81.60	7.0	81.67	7.9	81.75	8.9	81.60	7.0	81.59	6.9	6.9
RFA_366	81.69	7.0	81.76	7.9	81.83	8.8	81.69	7.0	81.68	6.9	6.9

Bakers Bridge										
RFA_367	83.08	7.0	83.25	7.9	83.55	8.8	83.22	7.0	83.49	6.9
RFA_368	83.13	7.0	83.30	7.9	83.58	8.8	83.26	7.0	83.52	6.9
RFA_369	83.39	2.0	83.58	2.2	83.83	2.3	83.49	1.9	83.69	1.7
Bakers Mill Sluices										
RFA_370	85.40	2.0	85.42	2.2	85.44	2.3	85.41	1.9	85.41	1.7
RFA_371	85.40	1.8	85.43	1.9	85.45	2.1	85.41	1.7	85.42	1.7
RFA_372	85.41	1.9	85.43	1.9	85.46	2.1	85.42	1.8	85.43	1.7
RFA_373	85.42	2.4	85.45	2.7	85.47	3.0	85.43	2.4	85.44	2.4
RFA_374	85.44	4.7	85.47	5.4	85.50	6.0	85.45	4.7	85.46	4.7
RFA_375	85.53	4.7	85.57	5.3	85.61	6.1	85.54	4.7	85.54	4.7
RFA_376	85.61	4.6	85.65	5.3	85.69	6.1	85.62	4.7	85.62	4.7
RFA_377	86.07	4.6	86.10	5.3	86.13	6.1	86.07	4.7	86.07	4.7
RFA_378	86.73	4.4	86.75	4.5	86.79	4.6	86.72	4.1	86.71	3.7
Puck Mill Culvert										
RFA_379	93.38	4.4	93.54	4.5	93.70	4.6	93.50	4.0	93.64	3.6
RFA_380	93.38	4.4	93.54	4.5	93.70	4.6	93.51	4.0	93.64	3.7
RFA_381	93.38	4.5	93.54	4.6	93.70	4.7	93.51	4.1	93.64	3.8
RFA_382	93.38	5.2	93.54	5.4	93.70	5.7	93.51	4.8	93.64	4.5
RFA_383	93.38	5.7	93.54	5.8	93.70	6.2	93.51	5.4	93.64	5.1
RFA_384	93.38	5.7	93.54	5.8	93.70	6.0	93.51	5.5	93.64	5.2
RFA_385	93.38	7.1	93.55	7.4	93.71	7.7	93.51	7.0	93.64	6.6
RFA_386	93.39	5.2	93.55	5.4	93.71	5.7	93.51	5.2	93.64	4.9
RFA_387	93.39	5.1	93.55	5.4	93.71	6.5	93.51	5.0	93.65	5.2
RFA_388	93.39	6.3	93.55	6.3	93.71	7.2	93.51	6.3	93.65	6.2
RFA_389	93.40	10.4	93.56	11.4	93.72	12.5	93.52	10.4	93.65	10.4

RFO_001	47.20	5.5	47.24	5.8	47.28	6.2	47.24	5.3	47.29	5.1
RFO_002	47.22	5.6	47.26	6.0	47.30	6.4	47.26	5.5	47.31	5.2
RFO_003	47.25	5.0	47.29	5.3	47.33	5.7	47.28	4.8	47.33	4.2
RFO_004	47.28	5.0	47.31	5.3	47.36	5.7	47.31	4.8	47.34	4.2
RFO_005	47.30	5.0	47.34	5.3	47.37	5.7	47.33	4.8	47.35	4.2
Griffin Mill Footbridge 3										
RFO_006	47.33	5.0	47.39	5.3	47.46	5.7	47.37	4.8	47.39	4.2
RFO_007	47.34	5.0	47.40	5.3	47.47	5.7	47.37	4.8	47.40	4.2
Griffin Mill Weir 1										
RFO_008	47.81	5.0	47.83	5.3	47.86	5.7	47.83	4.8	47.82	4.2
RFO_009	47.82	5.0	47.85	5.3	47.87	5.7	47.84	4.8	47.83	4.2
Griffin Mill Culvert										
RFO_010	48.17	5.0	48.22	5.3	48.27	5.7	48.18	4.8	48.12	4.2
RFO_011	48.21	5.0	48.25	5.3	48.30	5.7	48.21	4.8	48.15	4.2
Griffin Mill Weir 2										
RFO_012	48.60	5.0	48.63	5.3	48.67	5.7	48.63	4.8	48.72	4.2
RFP_001	48.80	2.2	48.84	2.3	48.87	2.5	48.81	2.0	48.85	1.9
RFP_002	48.81	2.2	48.85	2.3	48.88	2.5	48.82	2.0	48.86	1.9
Brookside Bridge 2										
RFP_003	48.82	2.2	48.85	2.3	48.89	2.5	48.82	2.0	48.87	1.9
RFP_004	48.84	2.2	48.87	2.3	48.91	2.5	48.84	2.0	48.88	1.9
Phoenix Mill Culvert										
RFP_005	50.19	2.2	50.27	2.3	50.35	2.5	50.23	2.0	50.27	1.9
RFP_006	50.19	2.2	50.27	2.7	50.35	4.6	50.23	2.0	50.27	2.2
RFQ_001	57.78	2.8	57.83	2.8	57.89	2.9	57.78	2.5	57.77	2.3
RFQ_002	57.84	2.8	57.87	2.8	57.92	2.9	57.83	2.5	57.81	2.3

Bourne Mills Sluice										
Rfq_003	58.51	2.8	58.53	2.8	58.55	2.9	58.53	2.5	58.54	2.3
Rfq_004	58.55	5.7	58.56	6.2	58.58	6.7	58.56	5.7	58.56	5.8
RFR_001	62.73	5.2	62.78	5.7	62.83	6.4	62.72	5.1	62.69	4.8
St Marys Mill Culvert										
RFR_002	64.54	5.2	64.61	5.7	64.69	6.4	64.60	5.1	64.64	4.8
RFS_001	64.93	2.2	65.00	2.3	65.09	2.4	64.94	2.0	64.93	1.8
RFS_002	64.94	2.2	65.01	2.3	65.10	2.4	64.95	2.0	64.93	1.8
Iles Mill Culvert										
RFS_003	66.16	2.2	66.17	2.3	66.19	2.4	66.17	2.0	66.17	1.8
RFS_004	66.15	2.2	66.16	2.3	66.17	2.4	66.15	2.0	66.16	1.8
Junction with RFT_003										
RFS_005	66.15	2.2	66.16	2.3	66.17	2.5	66.15	2.0	66.16	1.8
RFS_006	66.18	5.8	66.19	6.4	66.20	7.0	66.18	5.8	66.18	5.5
RFS_007	66.26	5.8	66.28	6.4	66.30	7.0	66.26	5.8	66.25	5.5
RFT_001	65.40	0.0	65.55	0.0	65.76	0.0	65.42	0.0	65.38	0.0
RFT_002	65.40	0.0	65.55	0.0	65.76	0.0	65.42	0.0	65.38	0.0
Iles Mill Bypass Sluices										
RFT_003	66.15	0.0	66.16	0.0	66.17	0.0	66.15	0.0	66.16	0.0
SCB_001	43.91	0.0	44.01	0.0	44.19	0.0	43.99	0.0	44.24	0.0
SCB_002	43.91	0.4	44.01	1.0	44.19	2.1	43.99	0.8	44.24	1.8
SCB_003	43.91	0.4	44.01	1.0	44.19	2.1	43.99	0.8	44.24	1.8
SCB_004	43.91	0.4	44.01	1.0	44.19	2.1	43.99	0.9	44.24	1.8
SCB_005	43.91	0.4	44.02	1.0	44.20	2.1	44.00	0.9	44.24	1.8
SCB_006	43.92	0.1	44.02	0.1	44.20	0.1	44.00	0.1	44.25	0.1
Butterrow Hill Canal Bridge										

SCB_007	43.92	0.1		44.02	0.1	44.20	0.1	44.00	0.1	44.25	0.1
SCB_008	43.92	0.1		44.02	0.1	44.20	0.1	44.00	0.1	44.25	0.1
Bowbridge Lock Weir											
SCB_009	46.34	0.1		46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1
SCB_010	46.34	0.1		46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1
SCB_011	46.34	0.1		46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1
SCB_012	46.34	0.1		46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1
SCB_013	46.34	0.1		46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1
SCB_014	46.34	0.1		46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1
SCB_015	46.34	0.1		46.34	0.1	46.34	0.1	46.34	0.1	46.34	0.1
Griffins Mill Lock Weir											
SCB_016	49.36	0.1		49.36	0.1	49.36	0.1	49.36	0.1	49.37	0.1
SCB_017	49.36	0.1		49.36	0.1	49.36	0.1	49.36	0.1	49.37	0.1
SCB_018	49.36	0.1		49.36	0.1	49.36	0.1	49.36	0.1	49.37	0.1
SCB_019	49.36	0.1		49.36	0.1	49.36	0.1	49.37	0.1	49.37	0.1
Ham Lock Weir											
SCB_020	52.03	0.1		52.03	0.1	52.03	0.1	52.04	0.1	52.04	0.1
SCB_021	52.03	0.1		52.03	0.1	52.03	0.1	52.04	0.1	52.04	0.1
SCB_022	52.03	0.1		52.03	0.1	52.03	0.1	52.04	0.1	52.04	0.1
SCB_023	52.03	0.1		52.03	0.1	52.03	0.1	52.04	0.1	52.04	0.1
SCB_024	52.76	0.1		52.76	0.1	52.76	0.1	52.76	0.1	52.76	0.1
SCC_001	59.78	0.0		59.80	0.0	59.81	0.0	59.78	0.0	59.79	0.0
SCC_002	59.81	0.1		59.82	0.1	59.83	0.1	59.80	0.0	59.80	0.0
SCC_003	59.84	0.1		59.85	0.1	59.86	0.1	59.83	0.0	59.83	0.0
SCC_004	59.85	0.1		59.86	0.1	59.87	0.1	59.84	0.0	59.83	0.0
SCC_005	59.85	0.1		59.86	0.1	59.87	0.1	59.84	0.0	59.84	0.0

Wimberley Canal Weir												
SCC_006	63.09	0.1	63.09	0.1	63.10	0.1	63.08	0.0	63.09	0.0	63.09	0.0
SCC_007	63.09	0.1	63.09	0.1	63.10	0.1	63.08	0.0	63.09	0.0	63.09	0.0
SCC_008	63.09	0.1	63.09	0.1	63.10	0.1	63.09	0.1	63.09	0.1	63.09	0.0
SCC_009	63.09	0.1	63.09	0.1	63.10	0.1	63.09	0.1	63.09	0.1	63.09	0.0
SCC_010	63.09	0.1	63.09	0.1	63.10	0.1	63.09	0.1	63.09	0.1	63.09	0.1
SCC_011	63.09	0.1	63.09	0.1	63.10	0.1	63.09	0.1	63.09	0.1	63.09	0.1
SCC_012	63.09	0.0	63.09	0.0	63.10	0.0	63.09	0.0	63.09	0.0	63.09	0.0
SCC_013	63.09	0.0	63.09	0.0	63.10	0.0	63.09	0.0	63.09	0.0	63.09	0.0
Iles Mill Canal Culvert												
SCC_014	64.58	0.0	64.58	0.0	64.58	0.0	64.58	0.0	64.58	0.0	64.58	0.0
SCC_015	64.77	0.0	64.77	0.0	64.78	0.0	64.74	0.0	64.72	0.0	64.72	0.0
Iles Lock Weir												
SCC_016	67.37	0.0	67.37	0.0	67.37	0.0	67.37	0.0	67.36	0.0	67.36	0.0
SCC_017	67.40	0.0	67.40	0.0	67.41	0.0	67.39	0.0	67.38	0.0	67.38	0.0
Belvedere Mill Canal Culvert												
SCC_018	70.16	0.0	70.16	0.0	70.17	0.0	70.20	0.0	70.16	0.0	70.16	0.0
SCC_019	70.18	0.0	70.18	0.0	70.18	0.0	70.20	0.0	70.16	0.0	70.16	0.0
Chalford Canal Culvert 1												
SCC_020	70.51	0.0	70.51	0.0	70.51	0.0	70.50	0.0	70.50	0.0	70.50	0.0
SCC_021	70.52	0.0	70.52	0.0	70.53	0.0	70.51	0.0	70.50	0.0	70.50	0.0
Chalford Canal Culvert 2												
SCC_022	72.06	0.0	72.06	0.0	72.06	0.0	72.05	0.0	72.05	0.0	72.05	0.0
SCC_023	72.15	0.0	72.15	0.0	72.16	0.0	72.12	0.0	72.10	0.0	72.10	0.0
Chalford Chlra Canal Culvert												
SCC_024	74.12	0.0	74.12	0.0	74.13	0.0	74.11	0.0	74.11	0.0	74.11	0.0

SCC_025	74.34	0.0	74.34	0.0	74.36	0.0	74.30	0.0	74.27	0.0
SCC_026	74.44	0.0	74.45	0.0	74.47	0.0	74.39	0.0	74.34	0.0
Clowes Bridge Lock Weir										
SCC_027	76.85	0.0	76.85	0.0	76.85	0.0	76.84	0.0	76.84	0.0
SCC_028	76.92	0.0	76.93	0.0	76.93	0.0	76.92	0.0	76.91	0.0
SCC_029	77.05	0.0	77.05	0.0	77.06	0.0	77.04	0.0	77.02	0.0
SCC_030	77.08	0.0	77.09	0.0	77.09	0.0	77.07	0.0	77.04	0.0
SCC_032	79.78	0.0	79.78	0.0	79.79	0.0	79.77	0.0	79.77	0.0
SCC_033	79.78	0.0	79.78	0.0	79.79	0.0	79.77	0.0	79.77	0.0
SCC_034	79.78	0.0	79.78	0.0	79.79	0.1	79.77	0.0	79.77	0.0
SCC_035	79.78	0.8	79.78	0.8	79.79	0.9	79.78	0.7	79.77	0.6
SCC_036	79.80	0.8	79.80	0.8	79.81	0.9	79.79	0.7	79.78	0.6
SCC_037	79.81	0.8	79.81	0.8	79.81	0.9	79.80	0.7	79.79	0.6
SCC_038	79.82	0.8	79.83	0.8	79.83	0.9	79.81	0.7	79.80	0.6
SCC_039	79.88	0.8	79.88	0.8	79.89	0.9	79.86	0.7	79.84	0.6
SCC_040	79.90	0.8	79.91	0.8	79.91	0.9	79.88	0.7	79.86	0.6
SCC_041	79.91	0.8	79.92	0.8	79.93	0.9	79.89	0.7	79.87	0.6
SCC_042	79.94	0.8	79.94	0.8	79.95	0.9	79.92	0.7	79.89	0.6
SCC_043	79.98	0.8	79.99	0.8	79.99	0.9	79.96	0.7	79.94	0.6
SCC_044	80.02	0.8	80.03	0.8	80.04	0.9	80.00	0.7	79.98	0.6
SCC_045	80.05	0.8	80.05	0.8	80.06	0.9	80.02	0.7	80.00	0.6
SCC_046	80.06	0.8	80.07	0.8	80.07	0.9	80.04	0.7	80.01	0.6
Bakers Mill Lower Lock Weir										
SCC_047	83.17	0.8	83.17	0.8	83.18	0.9	83.16	0.7	83.16	0.6
SCC_048	83.17	1.7	83.17	1.8	83.18	2.0	83.16	1.6	83.16	1.4
SCC_049	83.17	1.7	83.17	1.8	83.18	2.0	83.16	1.6	83.16	1.4

SCC_050	83.17	1.7	83.17	1.8	83.18	2.0	83.16	1.6	83.16	1.4
Bakers Mill Upper Lock Weir										
SCC_051	85.44	1.7	85.46	1.8	85.49	2.0	85.45	1.6	85.45	1.4
SCC_052	85.44	3.9	85.46	4.3	85.48	4.6	85.45	3.7	85.45	3.5
SCC_053	85.45	3.9	85.47	4.3	85.49	4.6	85.45	3.7	85.46	3.5
SCC_054	85.46	3.9	85.48	4.3	85.51	4.6	85.46	3.7	85.46	3.5
SCC_055	85.48	3.9	85.50	4.3	85.53	4.7	85.48	3.7	85.48	3.5
SCC_056	85.49	3.9	85.52	4.3	85.55	4.6	85.49	3.7	85.49	3.5
SCC_057	85.51	3.9	85.53	4.3	85.56	4.6	85.50	3.7	85.50	3.5
Puck Mill Lower Lock Weir										
SCC_058	88.27	3.9	88.31	4.3	88.34	4.6	88.30	3.7	88.32	3.5
SCC_059	88.27	4.1	88.31	5.0	88.34	6.0	88.30	4.3	88.32	4.5
Puck Mill Upper Lock Weir										
SCC_060	91.02	4.1	91.11	5.0	91.20	6.0	91.09	4.3	91.17	4.5
SCC_061	91.73	4.1	91.79	5.0	91.84	6.0	91.66	4.3	91.61	4.5
Whitehall Lower Lock Weir										
SCC_062	93.36	4.1	93.52	5.0	93.68	6.0	93.49	4.3	93.62	4.5
SCC_063	93.38	3.4	93.54	4.1	93.70	4.9	93.50	3.6	93.64	3.7
SCC_064	93.38	2.9	93.54	3.5	93.70	4.0	93.50	3.0	93.64	3.2
SCC_065	93.38	3.3	93.54	3.8	93.70	4.3	93.51	3.3	93.64	3.3
SCC_066	93.38	3.2	93.54	3.6	93.70	4.0	93.51	3.2	93.64	3.2
SCC_067	93.39	3.4	93.55	3.9	93.71	4.3	93.51	3.5	93.64	3.4
SCC_068	93.39	3.3	93.55	3.7	93.71	4.1	93.51	3.4	93.64	3.4
SCC_069	93.39	2.8	93.55	3.3	93.71	3.6	93.51	2.9	93.64	3.0
SCC_070	93.39	0.0	93.55	0.0	93.71	0.0	93.51	0.0	93.64	0.0

Model Cell	100 Year Event (original)		100 Year Event + 10% flow		100 year Event + 20% flow		100 year Event - 10% coeffs		100 Year Event - 20% coeffs	
	Level (mOD)	Depth (m)	Level (mOD)	Depth (m)	Level (mOD)	Depth (m)	Level (mOD)	Depth (m)	Level (mOD)	Depth (m)
Cell 107	47.55	0.00	47.55	0.00	47.55	0.00	47.55	0.00	47.55	0.00
Cell 108	52.00	0.00	52.00	0.00	52.00	0.00	52.00	0.00	52.00	0.00
Cell 109	53.00	0.00	53.00	0.00	53.00	0.00	53.00	0.00	53.00	0.00
Cell 110	55.57	1.07	55.58	1.08	55.59	1.09	55.57	1.07	55.57	1.07
Cell 111	55.57	1.02	55.59	1.04	55.60	1.05	55.57	1.02	55.58	1.03
Cell 112	57.00	0.00	57.00	0.00	57.00	0.00	57.00	0.00	57.00	0.00
Cell 113	57.40	0.00	57.40	0.00	57.40	0.00	57.40	0.00	57.40	0.00
Cell 114	57.75	0.00	57.75	0.00	57.75	0.00	57.75	0.00	57.75	0.00
Cell 115	57.75	0.00	57.75	0.00	57.75	0.00	57.75	0.00	57.75	0.00
Cell 116	61.44	0.54	62.01	1.11	62.18	1.28	61.87	0.97	61.88	0.98
Cell 117	61.44	0.54	62.01	1.11	62.18	1.28	61.87	0.97	61.88	0.97
Cell 118	64.82	1.82	64.89	1.89	64.97	1.97	64.83	1.83	64.83	1.83
Cell 119	70.50	0.00	70.50	0.00	70.50	0.00	70.50	0.00	70.50	0.00
Cell 120	69.00	0.00	69.52	0.52	70.67	1.67	69.06	0.06	70.50	1.50
Cell 121	79.26	2.26	79.51	2.51	79.75	2.75	79.31	2.31	79.33	2.33
Cell 122	79.26	2.26	79.51	2.51	79.75	2.75	79.31	2.31	79.33	2.33
Cell 123	79.27	2.17	79.52	2.42	79.76	2.66	79.32	2.22	79.34	2.24
Cell 124	79.27	1.72	79.52	1.97	79.76	2.21	79.32	1.77	79.34	1.79
Cell 125	79.28	1.68	79.52	1.92	79.76	2.16	79.32	1.72	79.34	1.74
Cell 126	79.28	1.58	79.53	1.82	79.77	2.06	79.33	1.62	79.34	1.65
Cell 127	79.31	1.21	79.53	1.43	79.77	1.67	79.35	1.25	79.36	1.26
Cell 128	79.47	1.38	79.64	1.54	79.85	1.75	79.50	1.40	79.51	1.41
Cell 129	80.50	0.00	80.50	0.00	80.50	0.00	80.50	0.00	80.50	0.00
Cell 130	79.80	0.00	79.80	0.00	79.80	0.00	79.80	0.00	79.80	0.00

Cell 131	79.80	0.00	79.80	0.00	79.80	0.00	79.80	0.00	79.80	0.00
Cell 132	80.40	0.00	80.40	0.00	80.40	0.00	80.40	0.00	80.40	0.00
Cell 133	80.95	0.00	81.17	0.22	81.24	0.29	80.95	0.00	80.95	0.00
Cell 134	81.10	0.00	81.10	0.00	81.24	0.14	81.10	0.00	81.10	0.00
Cell 135	81.60	0.00	81.60	0.00	81.60	0.00	81.60	0.00	81.60	0.00
Cell 137	85.40	2.22	85.43	2.25	85.45	2.27	85.41	2.23	85.42	2.24
Cell 138	85.41	2.31	85.43	2.33	85.46	2.36	85.42	2.32	85.42	2.33
Cell 139	85.42	1.94	85.44	1.96	85.46	1.98	85.42	1.94	85.43	1.95
Cell 140	85.42	1.62	85.45	1.65	85.47	1.67	85.43	1.63	85.44	1.64
Cell 141	93.38	2.72	93.54	2.88	93.70	3.04	93.50	2.85	93.64	2.98
Cell 142	93.38	2.64	93.54	2.80	93.70	2.96	93.51	2.77	93.64	2.90
Cell 143	93.38	2.58	93.54	2.74	93.70	2.90	93.51	2.71	93.64	2.84
Cell 144	93.38	2.43	93.55	2.60	93.70	2.75	93.51	2.56	93.64	2.69
Cell 145	93.39	2.19	93.55	2.35	93.71	2.51	93.51	2.31	93.64	2.44
Cell 146	93.39	2.19	93.55	2.35	93.71	2.51	93.51	2.31	93.64	2.44
Cell 147	93.39	1.99	93.55	2.15	93.71	2.31	93.51	2.11	93.65	2.25

Section Label	100 Year Event (original)		100 Year Event + 10% flow		100 Year Event + 20% flow		100 Year Event - 10% coeffs		100 Year Event - 20% coeffs	
	Level (mOD)	Flow (m³/s)	Level (mOD)	Flow (m³/s)	Level (mOD)	Flow (m³/s)	Level (mOD)	Flow (m³/s)	Level (mOD)	Flow (m³/s)
NSA_001	31.59	14.3	31.59	15.0	31.59	15.8	31.59	13.6	31.59	12.8
Nellsworth Stream Outfall Weir										
NSA_002	34.63	14.3	34.68	15.0	34.72	15.8	34.68	13.6	34.73	12.8
NSA_003	34.70	14.3	34.73	15.0	34.77	15.8	34.72	13.6	34.76	12.8
NSA_004	34.96	14.3	34.99	15.0	35.02	15.8	34.94	13.6	34.93	12.8
Selsley Hill Culvert										
NSA_005	35.95	14.3	36.25	15.0	36.58	15.8	35.80	13.6	35.68	12.8
NSA_006	35.96	14.3	36.26	15.0	36.58	15.8	35.81	13.6	35.71	12.8
NSA_007	36.01	14.3	36.29	15.0	36.60	15.8	35.86	13.6	35.76	12.8
NSA_008	36.00	14.3	36.28	15.0	36.60	15.8	35.86	13.6	35.76	12.8
NSA_009	36.05	14.3	36.31	15.0	36.61	15.8	35.91	13.6	35.81	12.8
NSA_010	36.07	13.3	36.33	14.3	36.62	15.4	35.94	12.7	35.84	12.5
NSA_011	36.08	13.6	36.33	14.6	36.63	15.6	35.95	13.1	35.85	12.8
NSA_012	36.09	14.5	36.34	15.4	36.63	16.4	35.96	13.7	35.87	12.8
Variable Crested Weir										
NSA_013	36.47	14.5	36.68	15.4	36.94	16.4	36.42	13.7	36.39	12.8
Ernold Culvert										
NSA_014	38.31	14.4	38.40	15.4	38.49	16.3	38.28	13.6	38.22	12.8
NSA_015	38.37	14.4	38.46	15.4	38.55	16.3	38.35	13.6	38.28	12.8
Ernold Bridge										
NSA_016	39.71	14.4	40.00	15.4	40.30	16.3	39.86	13.6	40.04	12.8
NSA_017	39.72	14.4	40.00	15.4	40.31	16.3	39.87	13.6	40.04	12.8
NSA_018	39.73	14.4	40.01	15.4	40.31	16.3	39.88	13.6	40.05	12.8
Car Park Bridge										

NSA_019	39.70	14.4	39.98	15.4	40.28	16.3	39.85	13.6	40.03	12.8
NSA_020	39.74	14.4	40.03	15.4	40.32	16.3	39.89	13.6	40.05	12.8
NSA_021	39.77	14.4	40.05	15.3	40.34	16.3	39.91	13.6	40.07	12.8
NSA_022	39.80	14.4	40.06	15.3	40.35	16.3	39.93	13.6	40.08	12.8
Cotswold House Bridge										
NSA_023	39.96	14.3	40.16	15.3	40.41	16.3	40.04	13.6	40.15	12.8
NSA_024	39.98	14.3	40.16	15.3	40.41	16.3	40.05	13.6	40.15	12.8
New Tynings Footbridge										
NSA_025	40.05	14.3	40.24	15.3	40.47	16.3	40.11	13.6	40.20	12.8
NSA_026	40.11	14.3	40.28	15.3	40.50	16.3	40.15	13.6	40.23	12.8
NSA_027	40.20	14.3	40.34	15.3	40.53	16.3	40.22	13.6	40.28	12.8
The Priory Bridge										
NSA_028	40.55	14.3	40.65	15.3	40.78	16.3	40.55	13.6	40.56	12.8
NSA_029	40.58	14.3	40.69	15.3	40.82	16.3	40.58	13.6	40.59	12.8
NSA_030	40.65	14.3	40.75	15.3	40.87	16.3	40.65	13.6	40.65	12.8
NSA_031	40.68	14.3	40.78	15.3	40.90	16.3	40.67	13.6	40.67	12.8
NSA_032	40.72	14.3	40.82	15.3	40.94	16.3	40.71	13.6	40.70	12.8
NSA_033	40.75	14.3	40.84	15.3	40.96	16.3	40.74	13.6	40.73	12.8
NSA_034	40.80	14.3	40.88	15.3	40.99	16.3	40.78	13.6	40.76	12.8
NSA_035	40.86	14.3	40.95	15.3	41.05	16.3	40.84	13.5	40.82	12.8
NSA_036	40.85	14.2	40.93	15.3	41.03	16.3	40.83	13.5	40.81	12.8
Junction with NSB_001										
NSA_037	40.85	9.5	40.93	10.2	41.03	10.8	40.83	9.0	40.81	8.5
Rookmoor Mill Culvert - Right										
NSA_038	44.88	9.5	45.38	10.2	45.91	10.8	45.27	9.0	45.72	8.5
Rookmoor Mill Weir										

NSA_039	44.92	9.5	45.42	10.2	45.95	10.8	45.30	9.0	45.75	8.5
Junction with NSB_002										
NSA_040	44.92	14.3	45.42	15.3	45.95	16.3	45.30	13.6	45.75	12.8
NSA_041	44.92	14.4	45.42	15.5	45.95	16.6	45.30	13.7	45.75	13.0
NSA_042	44.92	14.4	45.42	15.7	45.95	16.7	45.30	13.8	45.75	13.2
NSA_043	44.92	14.5	45.42	15.9	45.95	16.9	45.30	14.0	45.75	13.4
NSA_044	44.92	14.6	45.42	16.0	45.95	17.1	45.30	14.0	45.75	13.5
Selsley Road Bridge										
NSA_045	44.94	14.6	45.43	16.1	45.95	17.2	45.31	14.1	45.76	13.6
Selsley Road Weir										
NSA_046	45.06	14.6	45.54	16.1	46.05	17.2	45.42	14.1	45.86	13.6
NSA_047	45.07	14.7	45.54	16.3	46.05	17.4	45.42	14.3	45.86	13.8
Pauls Rise Bridge										
NSA_048	45.14	14.7	45.57	16.4	46.06	17.6	45.45	14.3	45.87	14.0
NSA_049	45.14	14.8	45.57	16.6	46.06	17.9	45.46	14.4	45.87	14.2
NSA_050	45.16	14.8	45.58	16.7	46.07	18.2	45.47	14.5	45.88	14.5
NSA_051	45.17	14.8	45.58	16.9	46.07	18.5	45.47	14.6	45.88	14.8
Railway Bridge										
NSA_052	45.40	14.9	45.83	17.0	46.24	18.7	45.69	14.7	46.03	14.9
NSA_053	45.43	15.0	45.85	17.1	46.25	18.9	45.71	14.8	46.04	15.1
The Forge Weir										
NSA_054	45.71	15.0	46.10	17.2	46.46	19.0	45.97	14.8	46.28	15.1
NSA_055	45.73	15.0	46.11	17.2	46.46	19.0	45.98	14.8	46.28	15.2
Birds Crossing										
NSA_056	46.12	15.0	46.41	17.2	46.56	19.1	46.33	14.9	46.40	15.2
NSA_057	46.15	15.1	46.42	17.2	46.57	19.1	46.34	14.9	46.41	15.3

NSA_058	46.15	15.2	46.43	17.1	46.57	19.1	46.35	15.0	46.42	15.3
NSA_059	46.16	15.3	46.43	17.1	46.57	19.2	46.35	15.0	46.42	15.3
NSA_060	46.17	15.3	46.44	17.1	46.58	19.2	46.36	15.1	46.43	15.3
NSA_061	46.17	15.4	46.44	17.1	46.58	19.2	46.35	15.2	46.42	15.3
Station Road Works										
NSA_062	46.80	15.4	47.10	17.1	47.28	19.2	47.02	15.2	47.20	15.3
Station Road Bridge										
NSA_063	47.36	15.4	47.58	17.1	47.75	19.2	47.53	15.2	47.71	15.3
NSA_064	47.36	15.4	47.58	17.1	47.75	19.2	47.53	15.2	47.71	15.2
South Woodchester Works Bridge										
NSA_065	47.45	15.4	47.64	17.1	47.80	19.2	47.59	15.2	47.75	15.3
NSA_066	47.47	15.4	47.65	17.2	47.80	19.2	47.60	15.3	47.76	15.3
NSA_067	47.49	15.4	47.67	17.2	47.82	19.2	47.62	15.3	47.77	15.3
NSA_068	47.52	15.4	47.69	17.3	47.85	19.3	47.64	15.3	47.79	15.3
NSA_069	47.52	15.5	47.70	17.3	47.85	19.3	47.64	15.4	47.79	15.4
NSA_070	47.53	15.5	47.70	17.4	47.86	19.3	47.65	15.4	47.79	15.5
NSA_071	47.53	15.5	47.71	17.4	47.86	19.3	47.65	15.5	47.79	15.5
NSA_072	47.55	15.5	47.72	17.5	47.87	19.4	47.66	15.5	47.80	15.6
NSA_073	47.70	15.5	47.84	17.5	47.98	19.4	47.77	15.5	47.88	15.6
NSA_074	47.76	15.5	47.89	17.4	48.01	19.4	47.82	15.5	47.91	15.6
NSA_075	47.95	15.5	48.03	17.4	48.12	19.3	47.97	15.5	48.01	15.6
Frogmarsh Lane Bridge										
NSA_076	49.28	15.4	49.45	17.4	49.61	19.3	49.35	15.5	49.39	15.6
NSA_077	49.31	15.4	49.49	17.4	49.65	19.3	49.38	15.4	49.42	15.5
Bath Road Bridge										
NSA_078	49.33	15.4	49.51	17.4	49.77	19.3	49.40	15.4	49.45	15.5

NSA_079	49.34	15.4	49.52	17.4	49.78	19.3	49.41	15.4	49.46	15.5
NSA_080	49.38	15.4	49.55	17.4	49.80	19.3	49.44	15.4	49.48	15.5
NSA_081	49.38	15.4	49.55	17.4	49.79	19.3	49.44	15.4	49.48	15.4
NSA_082	49.40	15.4	49.57	17.4	49.81	19.4	49.46	15.4	49.50	15.4
Merretts Mills Bridge										
NSA_083	49.62	15.4	49.82	17.4	50.03	19.4	49.70	15.4	49.76	15.4
NSA_084	49.66	15.4	49.85	17.4	50.05	19.4	49.73	15.4	49.79	15.4
NSA_085	49.70	15.3	49.88	17.4	50.07	19.4	49.76	15.4	49.81	15.4
Merretts Mills Culvert										
NSA_086	50.92	15.3	50.94	17.3	50.95	19.4	51.02	15.3	51.09	15.4
NSA_087	50.93	15.2	50.94	17.3	50.96	19.4	51.02	15.3	51.09	15.3
NSA_088	50.92	15.2	50.94	17.3	50.95	19.3	51.01	15.3	51.09	15.3
Inchbrook Bridge										
NSA_089	51.00	15.2	51.02	17.3	51.04	19.3	51.09	15.3	51.15	15.3
NSA_090	51.01	15.2	51.03	17.3	51.05	19.3	51.09	15.2	51.16	15.3
NSA_092	51.63	15.1	51.70	17.2	51.78	19.2	51.63	15.1	51.64	15.2
Critchleys Bridge 1										
NSA_093	52.05	15.1	52.30	17.2	52.48	19.2	52.08	15.1	52.12	15.2
NSA_094	52.15	15.1	52.37	17.1	52.55	19.2	52.18	15.1	52.21	15.2
Junction with NSC_001										
NSA_095	52.15	6.2	52.37	8.2	52.55	10.1	52.18	6.7	52.21	7.4
Critchleys (New) Culvert										
NSA_096	52.34	6.2	52.74	8.2	53.04	10.1	52.40	6.7	52.49	7.4
NSA_097	52.48	2.3	52.88	3.6	53.16	5.4	52.55	2.6	52.65	3.0
Critchleys Bridge 2										
NSA_098	52.51	2.3	52.99	3.6	53.39	5.4	52.62	2.6	52.74	3.0

NSA_099	52.52	2.3	52.99	3.5	53.41	4.8	52.62	2.6	52.75	3.0
NSA_100	52.56	1.3	53.03	1.3	53.43	1.4	52.66	1.2	52.79	1.1
Dunkirk Mills Culvert										
NSA_101	55.96	1.2	56.09	1.3	56.19	1.3	56.05	1.2	56.15	1.1
Junction with NSC_016										
NSA_102	55.96	7.3	56.09	8.9	56.19	10.2	56.05	7.6	56.15	7.8
NSA_103	55.97	7.3	56.10	8.9	56.20	10.2	56.06	7.6	56.16	7.8
NSA_104	55.99	7.3	56.12	8.9	56.22	10.2	56.07	7.5	56.17	7.8
NSA_105	56.04	7.3	56.17	8.9	56.26	10.6	56.12	7.5	56.20	7.8
NSA_106	56.14	7.3	56.27	8.9	56.36	10.6	56.20	7.5	56.27	7.7
NSA_107	56.25	6.6	56.40	7.1	56.52	7.9	56.30	6.5	56.36	6.5
NSA_108	56.30	7.8	56.45	8.1	56.57	8.3	56.35	7.8	56.40	7.9
NSA_109	56.34	8.2	56.46	8.7	56.58	9.2	56.37	8.4	56.42	8.6
NSA_110	56.40	8.6	56.49	9.4	56.60	10.1	56.42	8.9	56.45	9.2
NSA_111	56.52	8.6	56.60	9.4	56.69	10.1	56.54	8.9	56.56	9.1
NSA_112	56.62	8.6	56.69	9.4	56.78	10.1	56.64	8.9	56.66	9.1
NSA_113	56.66	9.3	56.73	10.3	56.81	11.2	56.68	9.6	56.70	9.9
Junction with NSE_001										
NSA_114	56.66	11.9	56.73	12.7	56.81	13.5	56.68	11.9	56.70	11.8
NSA_115	56.75	13.6	56.80	14.6	56.87	15.5	56.76	13.6	56.77	13.6
NSA_116	56.90	14.8	56.92	16.2	56.97	17.7	56.90	14.8	56.90	14.8
NSA_117	57.10	14.8	57.15	16.2	57.20	17.7	57.10	14.8	57.10	14.8
NSA_118	57.20	14.8	57.27	16.2	57.32	17.7	57.20	14.8	57.20	14.8
Garage Culvert										
NSA_119	58.76	14.8	59.02	16.2	59.42	17.7	58.88	14.8	59.01	14.7
NSA_120	58.74	14.8	59.01	16.2	59.41	17.7	58.87	14.7	59.00	14.7

NSA_121	58.79	14.8	59.04	16.2	59.43	17.7	58.90	14.8	59.02	14.7
Egypt Mill Weir & Wheel										
NSA_122	58.94	14.8	59.17	16.2	59.53	17.7	59.06	14.8	59.19	14.8
NSA_124	58.92	14.8	59.16	16.3	59.53	17.7	59.05	14.8	59.18	14.8
NSB_001	40.85	4.8	40.93	5.1	41.03	5.5	40.83	4.5	40.81	4.3
Rookmoor Mill Culvert - Left										
NSB_002	44.92	4.8	45.42	5.1	45.95	5.5	45.30	4.5	45.75	4.3
NSC_001	52.15	9.0	52.37	9.1	52.55	9.2	52.18	8.4	52.21	7.8
Critchleys Left Hand Culvert										
NSC_002	53.16	9.0	53.21	9.1	53.28	9.3	53.20	8.4	53.24	7.9
NSC_003	53.16	9.0	53.22	9.2	53.28	9.3	53.20	8.4	53.24	7.9
NSC_004	53.22	7.6	53.27	7.6	53.33	7.7	53.25	7.1	53.28	6.6
NSC_005	53.29	7.5	53.33	7.5	53.38	7.5	53.30	7.0	53.32	6.5
NSC_006	53.29	11.4	53.33	11.9	53.38	12.2	53.30	11.1	53.32	10.8
Junction with NSD_001										
NSC_007	53.29	6.1	53.33	6.5	53.38	6.8	53.30	6.0	53.32	5.9
Critchleys Bridge 3										
NSC_008	53.31	6.1	53.35	6.5	53.39	6.8	53.32	6.0	53.34	5.9
Critchleys Bridge 4										
NSC_009	53.45	6.1	53.52	6.5	53.58	6.8	53.48	6.0	53.51	5.9
NSC_010	53.47	6.1	53.53	6.6	53.59	7.3	53.49	6.0	53.52	6.0
NSC_011	53.47	7.1	53.54	8.9	53.59	10.7	53.50	7.5	53.52	7.9
Tennis Court Bridge 2										
NSC_012	53.50	7.1	53.57	8.9	53.64	10.7	53.76	7.5	53.56	7.9
NSC_013	53.50	7.1	53.57	8.8	53.63	10.6	53.75	7.5	53.55	7.8
NSC_014	53.56	6.1	53.65	7.6	53.74	8.9	53.79	6.4	53.62	6.7

Dunkirk Mills Bridge 1										
NSC_015	53.68	6.1	53.84	7.6	54.00	8.9	53.94	6.4	53.80	6.7
Dunkirk Mills Side Sluices										
NSC_016	55.96	6.1	56.09	7.6	56.19	8.9	56.05	6.4	56.15	6.7
NSD_001	53.29	5.4	53.33	5.4	53.38	5.4	53.30	5.1	53.32	4.8
Critchleys Bridge 5										
NSD_002	53.72	5.4	53.75	5.4	53.78	5.4	53.76	5.1	53.80	4.8
NSD_003	53.77	5.4	53.80	5.4	53.82	5.4	53.80	5.1	53.84	4.8
NSD_004	53.83	5.3	53.85	5.4	53.87	5.4	53.85	5.1	53.87	4.8
NSD_005	53.88	5.3	53.90	5.4	53.91	5.5	53.89	5.1	53.91	4.8
Tennis Court Bridge 1										
NSD_006	54.22	5.3	54.24	5.4	54.27	5.5	54.23	5.1	54.23	4.8
NSD_007	54.22	6.3	54.23	6.6	54.26	7.2	54.22	6.1	54.23	6.0
Elm Brook Bridge 1										
NSD_008	54.59	6.3	54.61	6.6	54.62	7.2	54.60	6.1	54.61	6.0
NSD_009	54.60	6.3	54.62	6.6	54.63	7.2	54.61	6.1	54.61	6.0
The Gables Bridge										
NSD_010	54.63	6.3	54.65	6.6	54.67	7.2	54.64	6.1	54.64	5.9
NSD_011	54.66	6.3	54.68	6.6	54.70	6.8	54.66	6.1	54.67	5.9
Dunkirk Mills Entrance Bridge										
NSD_012	56.29	6.3	56.44	6.6	56.56	6.8	56.34	6.1	56.39	5.9
NSD_013	56.29	6.3	56.44	7.0	56.56	7.5	56.34	6.2	56.39	6.1
NSD_014	56.29	6.4	56.44	7.3	56.56	8.1	56.34	6.3	56.39	6.3
NSD_015	56.29	5.3	56.44	6.1	56.56	6.9	56.34	5.2	56.40	5.2
NSD_016	56.30	4.9	56.44	5.6	56.57	6.3	56.34	4.8	56.40	4.6
NSD_017	56.30	4.8	56.44	5.3	56.57	5.9	56.34	4.5	56.40	4.3

NSD_018	56.30	4.2	56.44	4.3	56.57	4.4	56.34	3.9	56.40	3.6
Filling Station Culvert										
NSD_019	56.63	4.2	56.71	4.3	56.80	4.4	56.66	3.9	56.68	3.6
NSD_021	56.66	5.6	56.73	6.1	56.81	6.5	56.68	5.3	56.70	5.1
Junction with NSE_002										
NSD_022	56.66	2.9	56.73	3.5	56.81	4.4	56.68	2.9	56.70	3.0
NSD_023	56.68	1.2	56.76	1.6	56.84	2.4	56.70	1.2	56.72	1.2
NSD_024	56.69	0.0	56.77	0.0	56.86	0.1	56.71	0.0	56.73	0.0
NSE_001	56.66	4.7	56.73	4.7	56.81	5.0	56.68	4.5	56.70	4.1
NSE_002	56.66	4.6	56.73	4.7	56.81	5.0	56.68	4.5	56.70	4.1

Model Cell	100 year Event (original)		100 Year Event + 10% flow		100 year Event + 20% flow		100 Year Event - 10% coeffs		100 Year Event - 20% coeffs	
	Level (mOD)	Depth (m)	Level (mOD)	Depth (m)	Level (mOD)	Depth (m)	Level (mOD)	Depth (m)	Level (mOD)	Depth (m)
Cell 201	36.08	0.58	36.33	0.83	36.63	1.13	35.95	0.45	35.84	0.34
Cell 202	56.29	2.29	56.44	2.44	56.56	2.56	56.34	2.34	56.39	2.39
Cell 203	56.30	1.30	56.45	1.45	56.57	1.57	56.35	1.35	56.40	1.40
Cell 204	56.31	1.31	56.45	1.46	56.58	1.58	56.35	1.35	56.41	1.41
Cell 205	56.65	1.40	56.72	1.47	56.80	1.54	56.67	1.42	56.69	1.44

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Wallingford Water is a joint venture operated by HR Wallingford Ltd and Institute of Hydrology